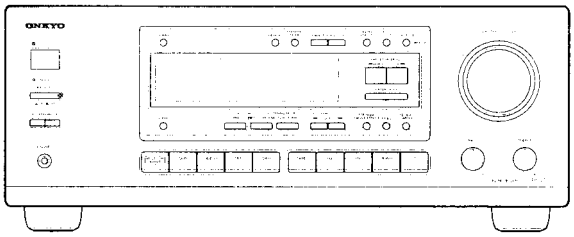
Ref. No. 3620
071999

ONKYO® SERVICE MANUAL

AUDIO VIDEO CONTROL RECEIVER

MODEL TX-DS575



Black and Silver and Golden models

BMD	120V AC, 60Hz
BMP／BMPT／BMPA／SMP／GMPT	230V AC, 50Hz
BMWT／BMWR／GMWT／GMWR	220-230V／120V AC, 50／60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

ONKYO®
AUDIO COMPONENTS

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SPECIFICATIONS

AMPLIFIER SECTION

Continuous Average Power output (FTC)	
All channels:	**70 watts per channel min. RMS at 8 ohms, 2 channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.** **90 watts min. RMS at 6 ohms, 2 channels driven from 1 kHz with no more than 0.1% total harmonic distortion.**
Continuous Power output (DIN)	100 watts × 5 at 6 ohms
Maximum Power output (EIAJ)	130 watts × 5 at 6 ohms
Total Harmonic Distortion:	0.08% at rated power (Front)
IM Distortion:	0.08% at rated power (Front)
Damping Factor:	60 at 8 ohms (Front)
Input Sensitivity and Impedance	
PHONO:	2.5 mV, 50 kohms
LINE (CD, TAPE, DVD, VIDEO 1, 2, 3):	200 mV, 50 kohms
MULTICHANNEL INPUT (FRONT L/R, SURROUND L/R, CENTER):	200 mV, 50 kohms
(SUBWOOFER):	36 mV, 50 kohms
COAXIAL 1, 2 (DIGITAL):	0.5 Vp-p, 75 ohms
Output Level and Impedance	
Rec out (TAPE, VIDEO 1):	200 mV, 2.2 kohms
Pre out (SUBWOOFER):	1 V, 2.2 kohms
Phono Overload:	70 mV RMS at 1 kHz, 0.5% T.H.D.
Frequency Response:	20 Hz to 30 kHz, ±1 dB
RIAA Deviation:	20 Hz to 20 kHz, ±0.8 dB
Tone Control	
Bass:	±10 dB at 100 Hz
Treble:	±10 dB at 10 kHz
Signal-to-Noise Ratio	
Phono:	80 dB (IHF A, 5 mV input)
CD/Tape:	100 dB (IHF A)

VIDEO SECTION

Input sensitivity/Impedance (DVD, VIDEO 1, 2, 3)	
VIDEO (Composite):	1 Vp-p, 75 ohms
Output Level/Impedance (VIDEO 1, MONITOR)	
VIDEO (Composite):	1 Vp-p, 75 ohms

TUNER SECTION

FM

Tuning Range:	87.5 — 108.0 MHz
Usable Sensitivity	
Mono:	11.2 dBf, 1.0 µV (75 ohms)
Stereo:	17.2 dBf, 2.0 µV (75 ohms)
50 dB Quieting Sensitivity	
Mono:	17.2 dBf, 2.0 µV (75 ohms)
Stereo:	37.2 dBf, 20 µV (75 ohms)
Capture Ratio:	2.0 dB
Image Rejection Ratio	
U.S.A. & Canadian models:	40 dB
Other area models:	85 dB
IF Rejection Ratio:	90 dB
Signal-to-Noise Ratio	
Mono:	76 dB
Stereo:	70 dB
Alternate Channel Attenuation:	55 dB
Selectivity:	50 dB (DIN)
AM Suppression Ratio:	50 dB
Total Harmonic Distortion	
Mono:	0.2%
Stereo:	0.3%
Frequency Response:	30 Hz — 15 kHz, ±1.0 dB
Stereo Separation:	45 dB at 1 kHz
	30 dB at 100 Hz — 10 kHz

AM

Tuning Range	
U.S.A. & Canadian models:	530—1,710 kHz (10 kHz steps)
European & Australian models:	522—1,611 kHz (9 kHz steps)
Worldwide models:	531—1,602 kHz (9 kHz steps), 530—1,710 kHz (10 kHz steps)
Usable Sensitivity:	30 µV
Image Rejection Ratio:	40 dB
IF Rejection Ratio:	40 dB
Signal-to-Noise Ratio:	40 dB
Total Harmonic Distortion:	0.7%

GENERAL

Power Supply:	AC 120 V, 60 Hz AC 230 V, 50 Hz AC 220-230 V and 120 V switchable, 50/60 Hz
Power Consumption:	3.9 A 325 W
Dimensions (W × H × D):	435 × 175 × 390 mm 17-1/8" × 6-7/8" × 15-3/8"
Weight:	12.3 kg, 27.1 lbs. 13.0 kg, 28.7 lbs. 12.9 kg, 28.4 lbs.

REMOTE CONTROL

Transmitter:	Infrared
Signal range:	Approx. 5 meters, 16 ft.
Power supply:	Two "AA" batteries (1.5 V × 2)

Specifications and features are subject to change without notice.

Power supply and voltage vary depending on the area in which the unit is purchased.

SERVICE PROCEDURES

1. Replacing the fuses

This symbol located near the fuses indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utlise est a rapide. Pour une protection permanente, n'untiliser que fusibles de meme type. Ce darnier est la qu le present symbol est appse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F911	252198Y	8A-UL, Primary <D/W>
F922	252077 or	4A-SE-EAK or
	252243	4A-SE-TL250V,Primary <P/T/W/A>
F933	252075 or	2.5A-SE-EAK or
	252241	2.5A-SE-TL250V,AC outlet <P/T>

Note: <D>:120V model only
<P>: European model only
<T>: Asian model only
<W>:Worldwide model only
<A>: Australian model only

2. To initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.
To perform a result, please follow the procedure below.

1.Press and hold down the VIDEO-1 button, then press the SPEAKER A button.
2.After "clear" is displayed, the preset memory and each mode stored in the memory, such as surround, are initialized and will return to the factory setting.

3. Safety-check out

(Only U.S.A. model)
After correcting the original service problem, perform the following safety check before releasing the set to the customer.
Connect the insulating-resistance tester between the plug of power supply cord and screw on the back panel.
Specifications: 3.3Mohm±10% at 500V.

4. Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.
The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

5.Setting the AM tuning step frequency (Wolrdwide models only)

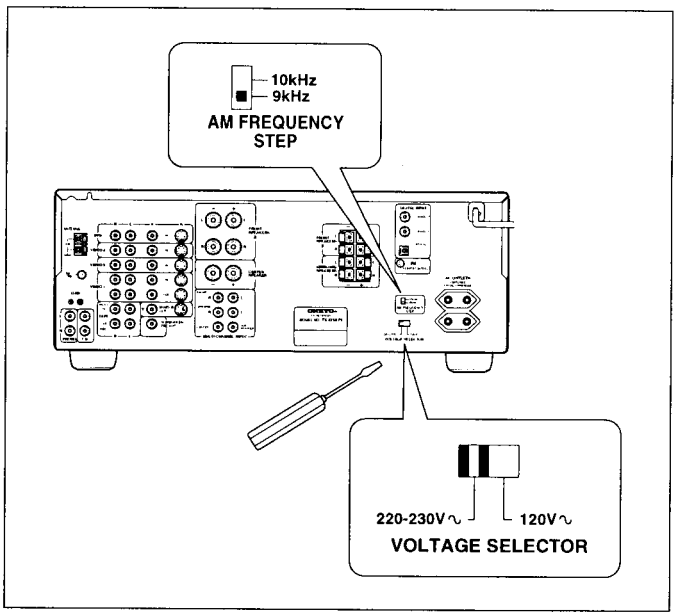
Worldwide models are equipped with a switch that controls the AM band tuning steps. Please set this switch to match the AM band tuning step frequency in your area.

U.S.A. and Canada : 10 kHz
Other areas : 9 kHz

6.Setting the Voltage selector (Worldwide models only)

Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit.

1. Determine the proper voltage for your area: 220-230 V or 120 V.
2. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch. Slide the switch all the way to the right (120 V) or to the left (220-230 V), whichever is appropriate.

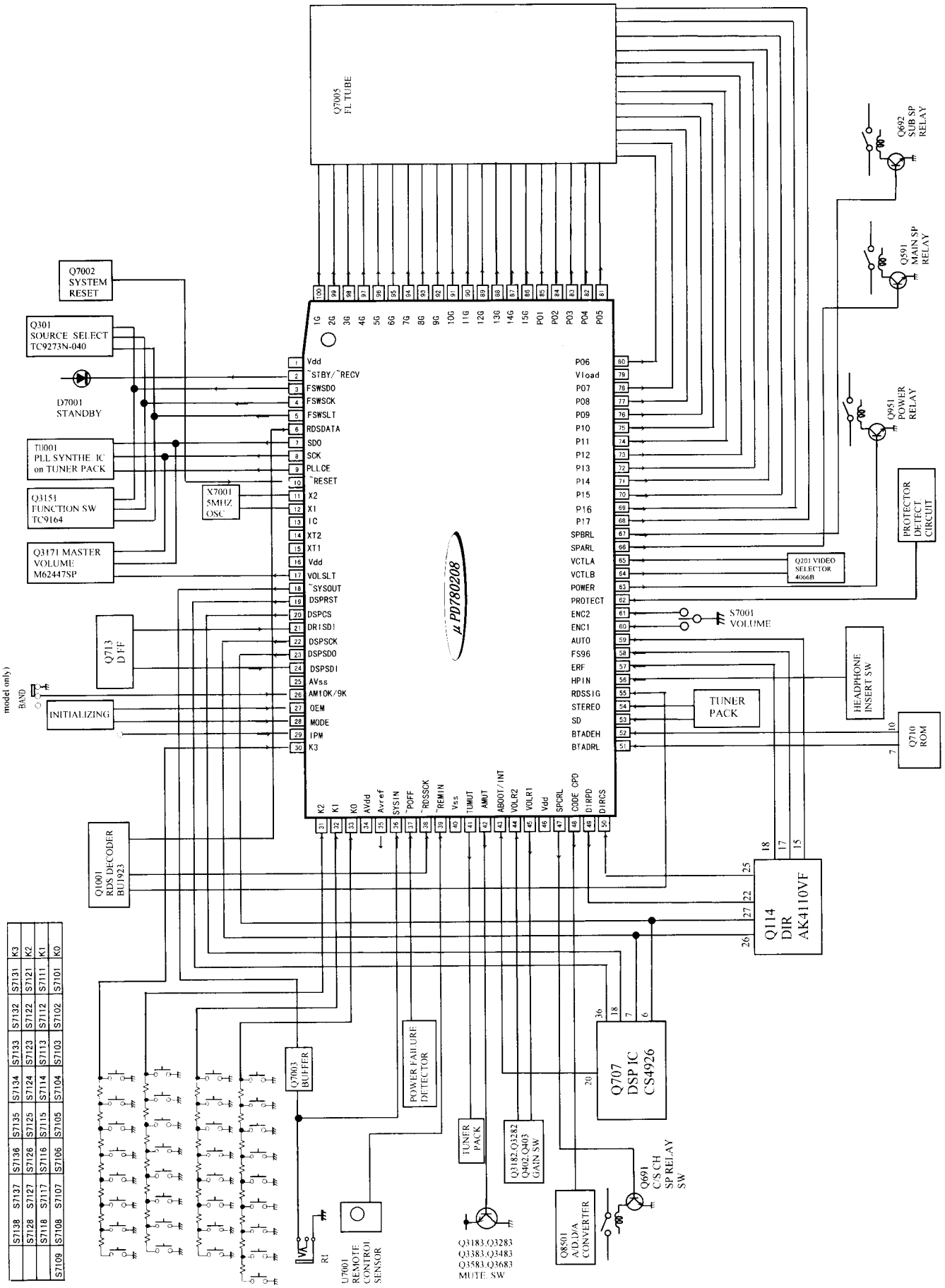


7. Changing the AM band step

With the exception of the worldwide models,a tuning step selector switch is not provided. When you change the band step, change the parts as shown below.

	To 10kHz	To 9kHz
R7077	Open	2.2k
R7130	10k	18k

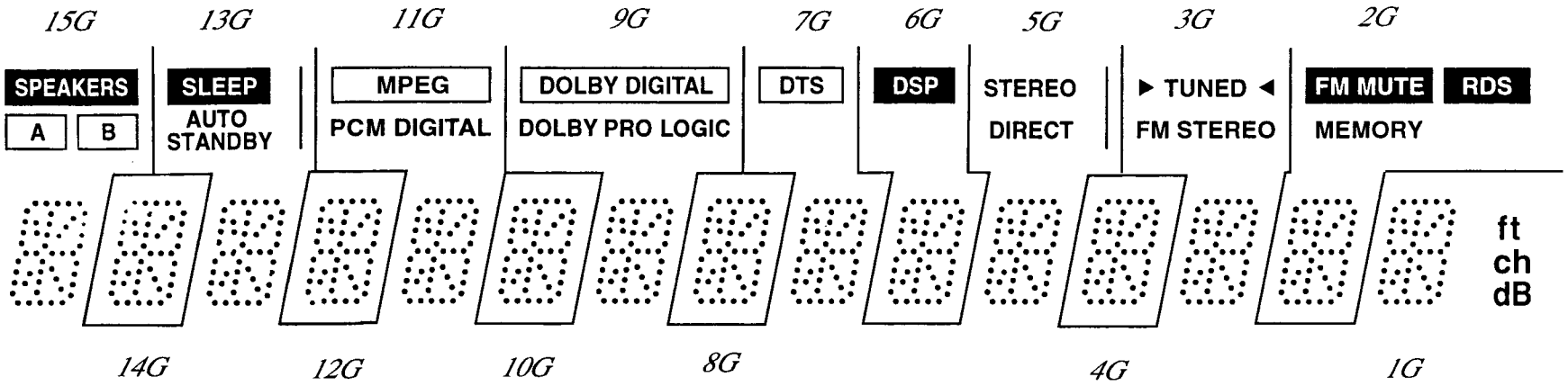
MICROPROCESSOR CONNECTION DIAGRAM

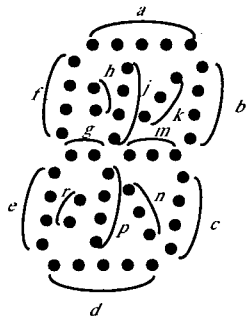


MICROPROCESSOR TERMINAL DESCRIPTION

No.	Symbol	I/O	Description
1	VDD	–	Power supply pin
2	STBY/RECV	O	Standby/Received indicator control output pin
3	FSWSDO	O	Serial data output pin to function switch IC
4	FSWSCK	O	Serial clock output pin to function switch IC
5	FSWSLT	O	Serial latch output pin to function switch IC
6	RDSDATA	I.	Data input pin from RDS decoder
7	SDO	O	Serial data output pin to PLL and Electro volume ICs.
8	SCK	O	Serial clock output pin to PLL and Electro volume ICs
9	PLLCE	O	Serial data latch output pin to PLL IC
10	RESET	I	System reset input pin
11	X2	O	Master clock connection pins.
12	X1	I	Connect the ceramic oscillator across the both pins.
13	IC	I	Internal connection pin.
14	XT2	O	Sub clock connection pins. Not used.
15	XT1	I	Not used.
16	VDD1	–	Power supply pin
17	VOLSLT	O	Serial latch output pin to Electro volume IC
18	SYSOUT	O	Signal output pin for system code
19	DSPRST	O	Reset signal output pin to DSP IC CS4926
20	DSPCS	O	Chip select output pin to DSP IC
21	DRISOI	I	Serial data input pin from the digital audio interface receiver IC AK4110
22	DSPSCK	O	Serial clock output pin to AK4110 and CS4926
23	DSPSDO	O	Serial data output pin to AK4110 and CS4926
24	DSPSDI	I	Serial data input pin from CS4926
25	Avss	I	Ground pin for A/D converter
26	AM9K/10K	I	Initializing input pin for AM band step. 9 kHz step at "H"
27	OEM	I	Initializing input pin for unit setting
28	MODE	I	Initializing input pin for operation mode
29	IPM	I	IPM switch connection pin. Not used.
30-33	K3-K0	I	Operation key connection pins.
34	AVDD	–	Power supply pin for A/D converter
35	AVREF	I	Reference voltage input pin for A/D converter
36	SYSIN	I	System code input pin
37	POFF	I	Power failure detect input pin
38	RDSSCK	I	Clock input pin from RDS decoder
39	REMIN	I	Signal input pin for remoter controller
40	AVss	–	ground pin
41	TUMUT	O	Muting control signal output pin for tuner section
42	AMUT	O	Muting control signal output pin for amplifier section
43	ABOOT/INT	I/O	AUTOBOOT/INTREQ input/output pin
44	VOL RL2	O	Control output pin for volume selector relay 2
45	VOL RL1	O	Control output pin for volume selector relay 1
46	VDD	–	Power supply pin
47	SPCRL	O	Speaker relay control output pin
48	CODE CPD	O	Power down control output pin for CODEC IC
49	DIRPD	O	Power down control output pin for AK4110
50	DIRCS	O	Chip select output pin for AK4110
51	BTADRH	O	Setting input pin for LSB address of boot ROM
52	BTADRL	O	Setting input pin for MSB address of boot ROM
53	SD	I	Broadcast detection input
54	STEREO	I	FM stereo broadcast detection input pin
55	RDSSIG	I	Signal input pin from RDS decoder
56	HPIN	I	Detection input pin when the headphones are inserted
57	ERF	I	ERF signal input pin from AK4110
58	FS96	I	FS96 signal input pin from AK4110
59	AUTO	I	AUTO signal input pin from AK4110
60	ENC1	I	Rotary encoder input pin for volume control
61	ENC2	I	Rotary encoder input pin for volume control
62	PROTECT	I	Detection input pin for protection circuit
63	POWER	O	Control output pin for power switch relay
64	VCTRB	O	Control output pin for video selector switch
65	VCTRA	O	Control output pin for video selector switch
66	SPARL	O	Control output pin for speaker relay A
67	SPBRL	O	Control output pin for speaker relay B
68-79	P17-P07	O	Segment output pins
79	VLOAD		Power supply pin for FL controller
80-85	P06-P01	O	Segment output pins
86-100	15G-1G	O	Grid output pins

FL TUBE VIEW





	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	SPEAKERS	-	SLEEP	-	MPEG	-	DOLBY DIGITAL	-	DTS	DSP	STEREO	-	TUNED	RDS	dB
P2	A	-	AUTO STANDBY	-		-		-		-	DIRECT	-	▶ ◀	FM MUTE	ch
P3	B	-	|	-	PCM DIGITAL	-	DOLBY PRO LOGIC	-	-	-	|	-	FM STEREO	MEMORY	ft
P4	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
P5	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h
P6	j	j	j	j	j	j	j	j	j	j	j	j	j	j	j
P7	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k
P8	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
P9	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
P10	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
P11	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
P12	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
P13	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
P14	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
P15	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
P16	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
P17	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d

PRINTED CIRCUIT BOARD PARTS LIST

NP : No spare parts

NOTE: THE COMPONENTS IDENTIFIDE BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PRE., AMPLIFIER PC BOARD (NAVD-6566-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	ICs		
Q203	22240373		BA7625
Q3171	22241296		M62447SP
Q3180,Q3181	22240247 or		BA15218N or
Q3281,Q3381	22240293		NJM4558L-D
Q3184	22240025		LC4966
Q3581	22240247 or		BA15218N or
	22240293		NJM4558L-D
	Transistors		
Q201,Q204	2213354 or		2SA933S-R or
	2212125		2SA1048-GR
Q202	2212286 or		2SC2878-B or
	2212285		2SC2878-A
Q205	2215830,	NP	KRC105M,
	2213640 or		DTC123JS or
	2214660		RN1205
Q3182,Q3183	2213631 or		RN1241-A or
Q3282,Q3283	2213632		RN1241-B
Q3185	2215770,	NP	KRA102M,
	2213510 or		DTA114ES or
	2214350		RN2202
Q3187	2215780,	NP	KRA103M,
	2213580 or		RN2203 or
	2212600		DTA124ES
Q3186	2215960,	NP	KRC102M,
	2213290 or		DTC114ES or
	2214230		RN1202
Q3188	221282,		DTC144ES,
	2213560 or		RN1204 or
	2215820	NP	KRC104M
Q3383,Q3483	2213631 or		RN1241-A or
Q3583,Q3683	2213632		RN1241-B
Q3684	2213631 or		RN1241-A or
	2213632		RN1241-B
	Diodes		
D201,D202	223163 or		1SS133 or
D207,D208	223205		1SS270A
D3171	224470512		MTZJ5.1B
D3182	223163 or		1SS133 or
	223205		1SS270A
D3276,D3277	224470472		MTZJ4.7B
	Capacitors		
C201-C204	354780229		2.2 μ F,50V, Elect.
C205,C206	354724719		470 μ F,6.3V, Elect.
C210	354721019		100 μ F,6.3V, Elect.
C3171,C3271	354780229		2.2 μ F,50V, Elect.
C3173,C3175	354741009		10 μ F,16V, Elect.
C3177,C3186	354741009		10 μ F,16V, Elect.
C3187,C3287	374721534		0.015 μ F±5%,50V,Plastic
C3189,C3195	354784709		47 μ F,50V, Elect.
C3192,C3193	354741009		10 μ F,16V, Elect.
C3194	354780479		4.7 μ F,50V, Elect.
C3196,C3296	354782209		22 μ F,50V, Elect.
C3286	354741009		10 μ F,16V, Elect.
C3289,C3295	354784709		47 μ F,50V, Elect.
C3371,C3471	354780229		2.2 μ F,50V, Elect.
C3381,C3481	354782209		22 μ F,50V, Elect.
C3384,C3484	354744709		47 μ F,16V, Elect.
C3571,C3671	354780229		2.2 μ F,50V, Elect.
C3581,C3681	354782209		22 μ F,50V, Elect.
C3586,C3684	354744709		47 μ F,16V, Elect.
C3683	374724734		0.047 μ F±5%,50V,Plastic
	Terminals		
P201	25045567		NPJ-1PDBL382
P202,P203	25045299		NPJ-3PDYE158
	Sockets		
P204	25051233		NSCT-8P1023
P205	25051527		NSCT-16P1314
P206	25051526		NSCT-4P1313
P391	2009990554UL		NSAS-16P0734
P601	2009990541UL		NSAS-10P0712

S TERMINAL PC BOARD (NAVD-6567-1B/1C/1D)
(Except 120V model)
This PC board is included to NAVD-6566.

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q2003,Q2004	22240373	BA7625
	Transistors	
Q2001,Q2002	2213354 or	2SA933S-R or
Q2005,Q2006	2212125	2SA1048-GR
	Diodes	
D2001,D2002	223163 or	1SS133 or
	223205	1SS270A
	Capacitors	
C2001-C2009	354780229	2.2 μ F,50V, Elect.
C2010,C2012	354724719	470 μ F,6.3V, Elect.
C2011	354780229	2.2 μ F,50V, Elect.
C2024	354741009	10 μ F,16V, Elect.
C2028,C2029	354722219	220 μ F,6.3V, Elect.
	Terminals	
P2001,P2002	25051568	NSCT-12P1355

PRIMARY CIRCUIT PC BOARD (NAPS-6570-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistor		
Q951	2215830,	NP	KRC105M,
	2213640 or		DTC123JS or
	2214660		RN1205
	Diodes		
D952	22380260,		RL1N4003,
	22380032 or		1SR139-100 or
	22380035		GP104003E
D955	223163 or		1SS133 or
	223205		1SS270A
	Power transformer		
T902	2301258 or	⚠	NPT-1294D or
	2301381	⚠	NPT-1358D <D>
	2301382	⚠	NPT-1358P <P/T/A>
	2301383	⚠	NPT-1358DG <W>
	Capacitors		
C902	3500196S	⚠	RE275V-103M,IS
C952	354743319		330 μ F,16V, Elect.
	Resistor		
R901	431533355	⚠	3.3MΩ,1/2W, Solid <D>
	Switch		
S902	25065437	⚠	NSS-22157P,Voltage <W>

NOTE: THE COMPONENTS IDENTIFIDE BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Relay		
RL901	25065561,	⚠	NRL-1P5A-DC12-127,
	25065508,	⚠	NRL-1P10A-DC12-093,
	25065515 or	⚠	NRL-1P5A-DC12-096 or
	25065526	⚠	NRL-1P5A-DC12-102
	Fuses		
F911	252198	⚠	8A-UL,Fuse <D/W>
F922	252077 or	⚠	4A-SE-EAK or
	252243	⚠	4A-SE-TL250V,Fuse <P/T/W/A>
F933	252075 or	⚠	2.5A-SE-EAK or
	252241	⚠	2.5A-SE-TL250V,Fuse <P/T>
	Fuse holders		
F901,F902	25052133	⚠	NSCT-1P2031 <D/W>
F903,F904	25052133	⚠	NSCT-1P2031 <P/T/W/A>
F905,F906	25052133	⚠	NSCT-1P2031 <P>
	AC outlet		
P903	25051126	⚠	NSCT-4P913 <D>
	25051125	⚠	NSCT-4P912 <P/T/W>
	25052115	⚠	NSCT-2P2013 <A>
	Plug		
P901A	25055675	⚠	NPLG-2P631
	Socket		
JL961B	25050267		NSCT-3P95

POWER SWITCH PC BOARD (NASW-6571-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.		DESCRIPTION
C901	3500196S	⚠	RE275V-103M,IS capacitor
S901	25035550	⚠	NPS-111-L512P,Push switch

INPUT SWITCH PC BOARD (NAETC-6572-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q301	22240864	TC9273N-004
Q302	22240247 or	BA15218N or
	22240293	NJM4558L-D
	Capacitors	
C315,C316	354741009	10 μ F,16V, Elect.
C321,C322	354782209	22 μ F,50V, Elect.
	Terminals	
P301,P302	25045575 or	NPJ-4PDRW389 or
	25045303	NPJ-4PDBL162
P305	25045571 or	NPJ-6PDRW386 or
	25045300	NPJ-6PDBL159
	Sockets	
P303	25051529	NSCT-18P1316
P304	25051526	NSCT-4P1313

DSP CIRCUIT PC BOARD (NADG-6575-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q101,Q102	22240581R1	NJM4565M
Q114	22241338R2	AK4110VF
Q701	22278033ENEC	MPC29M33HF
Q702	22241399R2	TC7WU04F
Q707	22241340R9	CS492604-CL
Q708,Q709	22274574ER2TO	TC74VHC574FT
Q710	22241339R2	LC372100PT-K25-TLM
Q713	22274244ER2TO	TC74VHC244FT
Q8501	22241341R3	AK4526A-VQ
Q8502-Q8504	22240581R1	NJM4565M

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D101-D109	223234R2 or	1SS352 or
	223233R1	1SS355
	Oscillators	
X103	3010320	AT-49 12.288MHz,Crystal
X701	3010278	CST12.2MTW040,Ceramic
	Coils	
L108-L110	231237M022R2	NCH-1471
L166,L168	230921R2	BLM21B222SPT<D>
		To 15,100 p'cs.
	433123314R1	330 Ohm <D>
		From 15,101 p'cs.
L170,L171	230921R2	BLM21B222SPT
L703-L705	231237M022R2	NCH-1471
L8501,L8502	231237M022R2	NCH-1471
R8507,R8508	230921R2	BLM21B222SPT
	Capacitors	
C101,C102	356741009R2	10 μ F,16V, Elect.
C108	356741009R2	10 μ F,16V, Elect.
C148,C158	356724709R2	47 μ F,6.3V, Elect.
C701,C702	354724719S	470 μ F,6.3V, Elect.
C703,C704	356721019R2	100 μ F,6.3V, Elect.
C716,C718	356724709R2	47 μ F,6.3V, Elect.
C8501,C8504	356721019R2	100 μ F,6.3V, Elect.
C8507	356721019R2	100 μ F,6.3V, Elect.
C8509-C8514	356741009R2	10 μ F,16V, Elect.
	Sockets	
P7004B	25052049,	NSCT-40P1836,
	25050980,	NSCT-40P767,
	25051306,	NSCT-40P1095,
	25051847 or	NSCT-40P1634 or
	25052236	NSCT-40P2133
P7205A	2009990542UL	NSAS-12P0713

DISPLAY CIRCUIT PC BOARD (NADIS-6576-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q7005	212198	15-BT-64GNK
	ICs	
Q1001	22241297R2	BU1923F <P>
Q401	22240581R1	NJM4565M
Q7001	22241398	MPD780208GF-047-3BA
	Refer to Caution 1 on page 22.	
	Remote sensor	
U7001	241330	PIC-26043TE2
	Transistors	
Q402,Q403	2215410R2	RN1441
Q7002	2214490R2	RN1404
Q7003,Q7004	2214540R2	RN2403
	Diodes	
D1001	223234R2 or	1SS352 or
	223233R1	1SS355 <P>
D7001	225290	SEL4110R
D7002,D7003	223234R2 or	1SS352 or
D7005-D7008	223233R1	1SS355
D7004	224490560R2	UDZ5.6B
D7009	224490910R2	UDZ9.1B
D7010	223234R2 or	1SS352 or
	223233R1	1SS355

CIRCUIT NO.	PART NO.	DESCRIPTION
	Oscillators	
X1001	3010203	AF6146CG,Crystal <P>
X7001	3010242	CST5.00MGW,Ceramic
	Coils	
L7001-L7003	231237K220R2	NCH-1477
	Capacitors	
C1001	355780229	2.2 μ F,50V, Elect.
C1003	355721019	100 μ F,6.3V, Elect.
C401,C402	355744709	47 μ F,16V, Elect.
C407,C408	355741009	10 μ F,16V, Elect.
C7001	355780229	2.2 μ F,50V, Elect.
C7002	3000078	DX-5R5L104,Super
C7004,C7005	355721019	100 μ F,6.3V, Elect.
C7008	355721019	100 μ F,6.3V, Elect.
C7009,C7010	355780109	1 μ F,50V, Elect.
C7014	355780109	1 μ F,50V, Elect.
C7015	355741009	10 μ F,16V, Elect.
C7018,C7019	355721019	100 μ F,6.3V, Elect.
	Switches	
S7101-S7109	25035652	NPS-111-S604
S7111-S7118	25035652	NPS-111-S604
S7121-S7128	25035652	NPS-111-S604
S7131-S7138	25035652	NPS-111-S604
	Plug	
JL701B	25055624	NPLG-3P586
	Sockets	
JL702A	25051090	NSCT-6P877
P7001A	25052086 or	NSCT-40P1873 or
P7004A	25052273	NSCT-40P2170
	Holder	
Q7005A	27191074	(FL)

MAIN PC BOARD (NAAR-6577-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q251	222780053	78L05
Q261	22240581R1	NJM4565M
Q3151	22241221R2	TC9164AF
Q921	222780125	78M12HF
Q922	222790125	79M12HF
Q931	222780565JRC	NJM78M56FA
Q933,Q934	222780055	78M05HF
	Transistors	
Q244	2213510,	DTA114ES,
	2215770 or NP	KRA102M or
	2214350	RN2202
Q245,Q246	2215024	2SD1468S-R
Q247	2215864, NP	KTC3199-GR,
	2212115 or	2SC2458-GR or
	2213284	2SC1740S-R <P>
Q932	2211455	2SA1015-GR
	Diodes	
D203,D204	224490620R2	UDZ6.2B
D901	22380285F or	RS403M or
	22380022F	RBV402
D931	224490620R2	UDZ6.2B
D932	223234R2 or	1SS352 or
	223233R1	1SS355
D933-D938	22380260,	RL1N4003,
D940,D941	22380032 or	1SR139-100 or
	22380035	GP104003E

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D939	224492700R2	UDZ27B
D942,D943	224490750R2	UDZ7.5B
	Capacitors	
C267,C268	354741009	10 μ F,16V, Elect.
C269,C270	354721019	100 μ F,6.3V, Elect.
C273,C274	374728224	8200pF±5%,50V,Plastic
C275,C276	374721824	1800pF±5%,50V,Plastic
C277,C278	354744709	47 μ F,16V, Elect.
C281	354741009	10 μ F,16V, Elect.
C282,C284	354780339	3.3 μ F,50V, Elect.
C3151,C3152	354741009	10 μ F,16V, Elect.
C923	3504213S	4700 μ F,35V, Elect.
C924	354761029S	1000 μ F,35V, Elect.
C927,C928	354741009	10 μ F,16V, Elect.
C933	354742229S	2200 μ F,16V, Elect.
C935	354741009	10 μ F,16V, Elect.
C936	354762219	220 μ F,35V, Elect.
C937	354772219S	220 μ F,63V, Elect.
C942,C943	354741009	10 μ F,16V, Elect.
C944,C945	354744709	47 μ F,16V, Elect.
	Resistors	
R921-R925	453532294	0.22 Ω±5%,1/2W,Metal
R926,R927	452630564F	5.6 Ω±5%,1W,Metal
R929	441623304F	33 Ω±5%,1W,Metal oxide
R932	452530224F	2.2 Ω±5%,1/2W,Metal
R933	452630224F	2.2 Ω±5%,1W,Metal
R934	442522204F	22 Ω±5%,1/2W,Metal oxide
R937	452630334F	3.3 Ω±5%,1W,Metal
R938,R939	443523314	330 Ω±5%,1/2W,Metal oxide
	Terminal	
P261	25045303 or	NPJ-4PDBL162 or
	25045575	NPJ-4PDRW389
	Plugs	
P204A	25055704	NPLG-8P660
P205A	25055805	NPLG-16P761
P206A,P304A	25055804	NPLG-4P760
P242A	25055995	NPLG-9P947
P303A	25055807	NPLG-18P763
	Sockets	
JL911A	25051111	NSCT-7P898
JL961A	25051107	NSCT-3P894
P101	25052024,	NSCT-15P1811,
	25050955,	NSCT-15P742,
	25051281,	NSCT-15P1070,
	25051822 or	NSCT-15P1609 or
	25052211	NSCT-15P2108
P242	200A2281810UL	NSAS-18P0731
P520	25052138	NSCT-7P2036
P7001B	25052049 or	NSCT-40P1836 or
	25052236	NSCT-40P2133
	Pan head screws	
Q921B,Q922B	82143010	3P+10FN(BC)
Q933B,Q934B	82143010	3P+10FN(BC)
	Heat sinks	
Q921A	27160179	
Q922A	27160229	
Q933A	27160209	

CAUTION: Replacement of the transistor of mark ✱, if necessary, must be made from the same beta group (HFE) as the original type.

DIGITAL INPUT PC BOARD(NADG-6578-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
U7201	24120037	TORX178A,Photo coupler
Q7201	222740046R2TO	TC74HCU04F,IC
L7202,L7203	231237M022R2	NCH-1471,Coil
C7203	354721019	100 μ F,6.3V, Elect. Capacitor
P7201	25045504	NPJ-1PDBL319,RI
P7202,P7203	25045473	NPJ-1PDBL291,Coacial
P7205B	25055136	NPLG-6P120,Plug
P7206	2009990540UL	NSAS-4P0711,Socket
S7201	25065286	NSS-22112,Switch <W>

HEADPHONE TERMINAL PC BOARD (NAETC-6579-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
JL702B	25051090	NSCT-6P877,Socket
P504B	25055445	NPLG-7P427,Plug
P7003	25045514	YKB26-5005,Headphone

TONE CONTROL PC BOARD (NAETC-6580-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C391,C392	374721534	0.015 μ F±5%,50V,Plastic
	Resistors	
R391,R392	5104356	N14RLC100KWT20Z,Variable
	Plug	
P391A	25055139	NPLG-9P123

VOLUME CONTROL PC BOARD (NAETC-6581-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
S7001	25065575	EC16B2425,Rotary encoder
JL701A	25051087	NSCT-3P874,Socket

FRONT CHANNEL POWER AMPLIFIER PC BOARD (NAAF-6583-1A/1B)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q501-Q504	2211732,	*	2SC1845-F,
	2211733,	*	2SC1845-E,
	2210755 or	*	2SC1775A-E or
	2210756	*	2SC1775A-F
Q505,Q506	2211732,		2SC1845-F,
Q527,Q528	2211733,		2SC1845-E,
Q581,Q582	2210755 or		2SC1775A-E or
	2210756		2SC1775A-F
Q507-Q510	2215843 or	NP	KTA1024-O or
Q513,Q514	2211353		2SA949-O
Q515,Q516	2215853 or	NP	KTC3206-O or
	2211633		2SC2229-O
Q517,Q518	2212654 or		2SC3421-Y or
	2212653		2SC3421-O
Q519,Q520	2203010		2SC5171
Q521,Q522	2203000		2SA1930
Q523,Q524	2203063,	*	2SC5198-O,
	2202523,	*	2SC4468-O,
	2202524,	*	2SC4468-Y,
	2202526 or	*	2SC4468-P or
	2203062	*	2SC5198-R
Q583	2211792 or		2SA992-F or
	2211793		2SA992-E

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q525,Q526	2203053,	*	2SA1941-O,
	2202513,	*	2SA1695-O,
	2202514,	*	2SA1695-Y,
	2202516 or	*	2SA1695-P or
	2203052	*	2SA1941-R,Transistor
Q529,Q530	2215864,	NP	KTC3199-GR,
	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q591	2215830,	NP	KRC105M,
	2213640 or		DTC123JS or
	2214660		RN1205
	Diodes		
D511,D512	223163 or		1SS133 or
	223205		1SS270A
D571	224470512		MTZJ5.1B
D910	22380038 or		RBV602 or
	22380274		RS603M,Diode
	Coils		
L501,L502	231176		S-1.3C
	Capacitors		
C501,C502	354784709		47 μ F,50V, Elect.
C503,.C504	374721015		100pF±10%,50V,Plastic
C505,C506	354742219		220 μ F,16V, Elect.
C507-C510	354781009		10 μ F,50V, Elect.
C517,C518	374724734		0.047 μ F±5%,50V,Plastic
C519,C520	374721044		0.1 μ F±5%,50V,Plastic
C521,C522	354744709		47 μ F,16V, Elect.
C525,C526	354771019		100 μ F,63V, Elect.
C535,C536	374721034		0.01 μ F±5%,50V,Plastic <P/T/W/A>
C581	354721019		100 μ F,6.3V, Elect.
C583	354780109		1 μ F,50V, Elect.
C905,C906	374731044		0.1 μ F±5%,100V,Plastic
C915,C916	3504351		10000 μ F,56V, Elect.
	Resistors		
R521-R524	443528204		82 Ω±5%,1/2W,Metal oxide
R525,R526	443526804		68 Ω±5%,1/2W,Metal oxide
R527,R528	443528204		82 Ω±5%,1/2W,Metal oxide
R529,R530	443525604		56 Ω±5%,1/2W,Metal oxide
R539-R542	453530224		2.2 Ω±5%,1/2W,Metal
R543,R544	443522214		220 Ω±5%,1/2W,Metal oxide
R547,R548	4000132 or		RGC55 0.22 or
	4500245		BPR55FK0.22, Metal plate
R555,R556	453630824		8.2 Ω±5%,1W,Metal
R557,R558	443623914		390 Ω±5%,1W,Metal oxide
R573,R574	5210259		N06HR2KBC,Trimming
R591,R592	4500171F		2.2 Ω±5%,1/4W,Metal
	Plugs		
P511,P512	25055038		NPLG-2P29
P520A	25055913		NPLG-7P866
	Sockets		
P504	2002381460UL		NSAS-14P0710
JL902B	25050269		NSCT-5P97
JL903A	25051108		NSCT-4P895
JL501A	25051110		NSCT-6P897
JL901A	25051111		NSCT-7P898
JL503A	25051112		NSCT-8P899

POWER AMPLIFIER PC BOARD (NAAF-6584-1A/1B)

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
Q1501,Q1502	2211732,		2SC1845-F,
Q601-Q604	2211733,		2SC1845-E,
	2210755 or		2SC1775A-E or
	2210756		2SC1775A-F
Q1503	2211732,		2SC1845-F,
Q1514	2211733,		2SC1845-E,
	2210755 or		2SC1775A-E or
	2210756		2SC1775A-F
Q1504-Q1507	2215843 or	NP	KTA1024-O or
	2211353		2SA949-O
Q1508	2215853 or	NP	KTC3206-O or
	2211633		2SC2229-O
Q1509	2212653 or		2SC3421-O or
	2212654		2SC3421-Y
Q1510	2203010		2SC5171
Q1511	2203000		2SA1930
Q1512	2203063,	*	2SC5198-O,
Q623,Q624	2202523,	*	2SC4468-O,
	2202524,	*	2SC4468-Y,
	2202526 or	*	2SC4468-P or
	2203062	*	2SC5198-R
Q1513	2203053,	*	2SA1941-O,
Q625,Q626	2202513,	*	2SA1695-O,
	2202514,	*	2SA1695-Y,
	2202516 or	*	2SA1695-P or
	2203052	*	2SA1941-R
Q1515	2215864,	NP	KTC3199-GR,
	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q609,Q610	2211732,		2SC1845-F,
Q627,Q628	2211733,		2SC1845-E,
	2210755 or		2SC1775A-E or
	2210756		2SC1775A-F
Q605,Q606	2215843 or	NP	KTA1024-O or
Q613,Q614	2211353		2SA949-O
Q611,Q612	2215864,		KTC3199-GR,
	2212115 or		2SC2458-GR or
	2213284		2SC1740S-R
Q615,Q616	2212653 or		2SC3421-O or
	2212654		2SC3421-Y
Q617,Q618	2215853 or	NP	KTC3206-O or
	2211633		2SC2229-O
Q619,Q620	2203010		2SC5171
Q621,Q622	2203000		2SA1930
Q629,Q630	2215843 or	NP	KTA1024-O or
	2211353		2SA949-O
Q691,Q692	2215830,	NP	KRC105M,
	2213640 or		DTC123JS or
	2214660		RN1205
	Diodes		
D1501,D1506	223163 or		1SS133 or
D607,D608	223205		1SS270A
D691,D692	223163 or		1SS133 or
	223205		1SS270A
	Coils		
L1501	231176		S-1.3C
L601,L602	231176		S-1.3C

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C1501	354784709	47 μ F,50V, Elect.
C1502	374721015	100pF±10%,50V,Plastic
C1503	354742219	220 μ F,16V, Elect.
C1504,C1505	354781009	10 μ F,50V, Elect.
C1510	374724734	0.047 μ F±5%,50V,Plastic
C1511	374721044	0.1 μ F±5%,50V,Plastic
C1512	354744709	47 μ F,16V, Elect.
C1526	374721034	0.01 μ F±5%,50V,Plastic <P/T/W/A>
C1530	354780109	1 μ F,50V, Elect.
C1533,C1534	354771009	10 μ F,63V, Elect.
C1535	374721024	1000pF±5%,50V,Plastic <P/T/W/A>
C601,C602	354784709	47 μ F,50V, Elect.
C603,C604	374721015	100pF±10%,50V,Plastic
C605,C606	354744709	47 μ F,16V, Elect.
C607,C608	354742219	220 μ F,16V, Elect.
C615,C616	354781009	10 μ F,50V, Elect.
C619,C620	354781009	10 μ F,50V, Elect.
C621,C622	374724734	0.047 μ F±5%,50V,Plastic
C623,C624	374721044	0.1 μ F±5%,50V,Plastic
C625,C626	374721034	0.01 μ F±5%,50V,Plastic <P/T/W/A>
C627,C628	354772219S	220 μ F,63V, Elect.
C631-C634	354774709	47 μ F,63V, Elect.
C639,C640	354780109	1 μ F,50V, Elect.
C641,C642	374721024	1000pF±5%,50V,Plastic <P/T/W/A>
C681	354781009	10 μ F,50V, Elect.
	Resistors	
R1512,R1513	443528204	82 Ω±5%,1/2W,Metal oxide
R1515	443526804	68 Ω±5%,1/2W,Metal oxide
R1516	443528204	82 Ω±5%,1/2W,Metal oxide
R1517	443525604	56 Ω±5%,1/2W,Metal oxide
R1519	443522214	220 Ω±5%,1/2W,Metal oxide
R1522,R1523	453530224	2.2 Ω±5%,1/2W,Metal
R1524	4500245 or	BPR55FK0.22 or
	4000132	RGC55 0.22,Metal plate
R1529	453630824	8.2 Ω±5%,1W,Metal
R1532	5210288	N06HR2.2KBE,Trimming
R1534,R1535	4500159F	0.22 Ω±5%,1/4W,Metal
R623-R626	443528204	82 Ω±5%,1/2W,Metal oxide
R629,R630	443525604	56 Ω±5%,1/2W,Metal oxide
R633,R634	443526804	68 Ω±5%,1/2W,Metal oxide
R635,R636	443528204	82 Ω±5%,1/2W,Metal oxide
R641,R642	443522214	220 Ω±5%,1/2W,Metal oxide
R643-R646	453530224	2.2 Ω±5%,1/2W,Metal
R647,R648	4500245 or	BPR55FK0.22 or
	4000132	RGC55 0.22,Metal plate
R655,R656	453630824	8.2 Ω±5%,1W,Metal
R659,R660	4500268	2.2 Ω±5%,1/2W,Metal
R673,R674	5210288	N06HR2.2KBE,Trimming
R675-R678	4500159F	0.22 Ω±5%,1/4W,Metal
	Relays	
RL1501	25065574	NRL-1P5A-DC24-134
RL601,RL602	25065563,	NRL-2P5A-DC24-129,
	25065510 or	NRL-2P5A-DC24-095 or
	25065517	NRL-2P5A-DC24-098

CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs	
P1511	25055038	NPLG-2P29
P611,P612	25055038	NPLG-2P29
P601A	25055236	NPLG-5P220
	Sockets	
JL903B	25050268	NSCT-4P96
JL902A	25051109	NSCT-5P896
JL501B	25050283	NSCT-6P111
	Terminal	
P603	25060290	NTM-8PDML221

SPEAKER TERMINAL PC BOARD (NAETC-6588-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diode	
D591	223163 or	1SS133 or
	223205	1SS270A
	Capacitors	
C561,C562	374721034	0.01 μ F±5%,50V, Plastic <P/T/W>
C565,C566	374721024	1000pF±5%,50V Plastic <P/T/W>
	Relay	
RL501	25065563,	NRL-2P5A-DC24-129,
	25065510 or	NRL-2P5A-DC24-095 or
	25065517	NRL-2P5A-DC24-098
	Sockets	
JL503B	25051112	NSCT-8P899
P502	200B010420UL	NSAS-4P0717
	Terminal	
P501	25060291	NTM-6PDMN222

MULTI-CHANNEL INPUT TERMINAL (NAAF-6589-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q241-Q243	22240247 or	BA15218N or
	22240293	NJM4558L-D
	Capacitors	
C248,C249	354741009	10 μ F,16V, Elect.
	Terminal	
P241	25045572	NPJ-6PDBRW387
	Plug	
P242A	25055995	NPLG-9P947

SECONDARY CIRCUIT PC BOARD (NAETC-6590-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C992	374731044	0.1 μ F±5%,100V,Plastic
C993,C994	374721044	0.1 μ F±5%,50V,Plastic
	Resistors	
R991,R992	453530104	1 Ω±5%,1/2W,Metal
R993	4500229	0.1 Ω±5%,1/4W,Metal
	Sockets	
JL901B	25051111	NSCT-7P898
JL911B	25050284	NSCT-7P112

NOTE: <D>:120V model only
<P>:European model only
<T>:Asian model only
<W>:Worldwide model only
<A>:Australian model only

CAUTION 1

Replacing the microprocessor Q7001

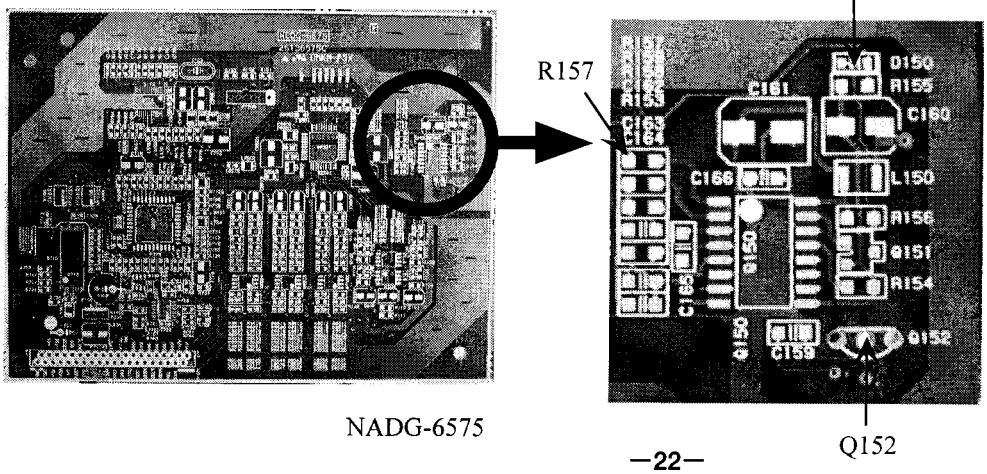
This unit is used the microprocessor of two types.

(MPD780208GF-***047***-3BA or MPD780208GF-***045***-BA)

When you replace the microprocessor MPD780208GF-***045***-BA,

use the microprocessor MPD780208GF-***047***-3BA instead of it.

At the same time you are necessary to remove R157, Q152, and D150.

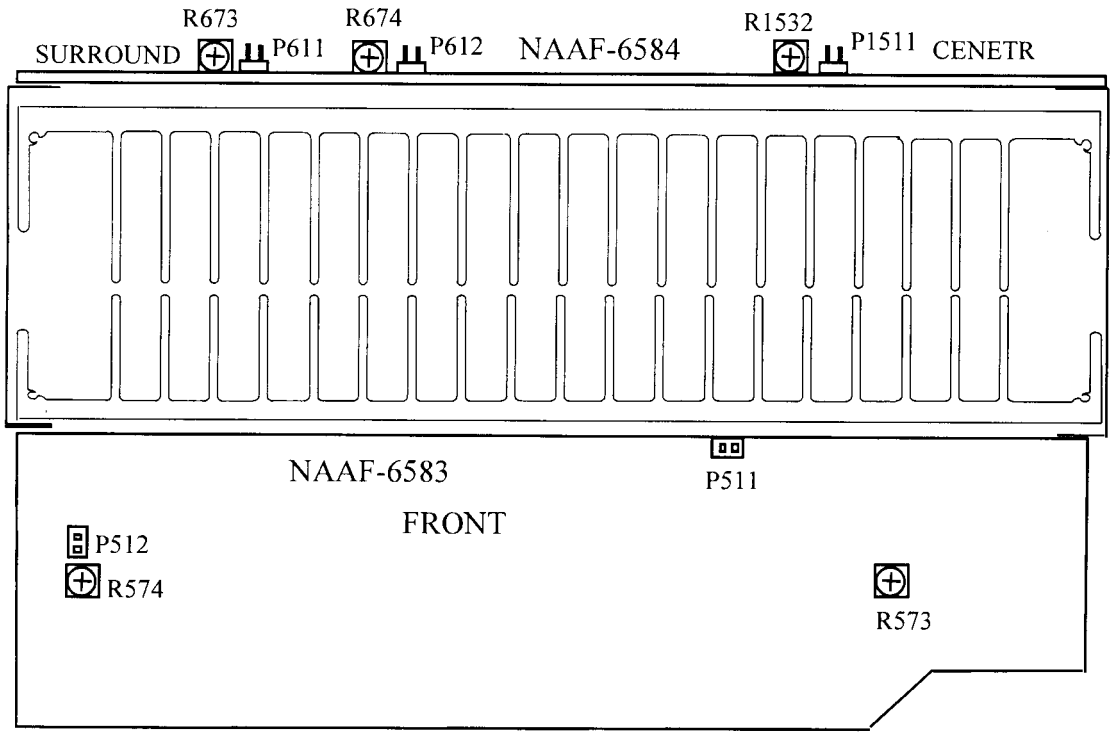


NADG-6575

ADJUSTMENT PROCEDURES AND CONFIRMATION

1.Idling current adjustment

Before Idling adjustment, turn the trimming resistors R573, R574, R673, R674 and R1532 to counter clockwise.
Connect the DC voltmeter to sockets P511,P512, P611, P612 and P1511.
After turn POWER to ON, adjust the trimming resistors R573, R574, R673, R674 and R1532 so that the reading of voltmeter becomes 2.5±0.2mV.
After adjustment, attach the top cover.
Confirm the voltage of above points after five minutes.
Readjust the above resistors so that the voltage becomes 6.5±0.2mV.
Note: No load and No signal

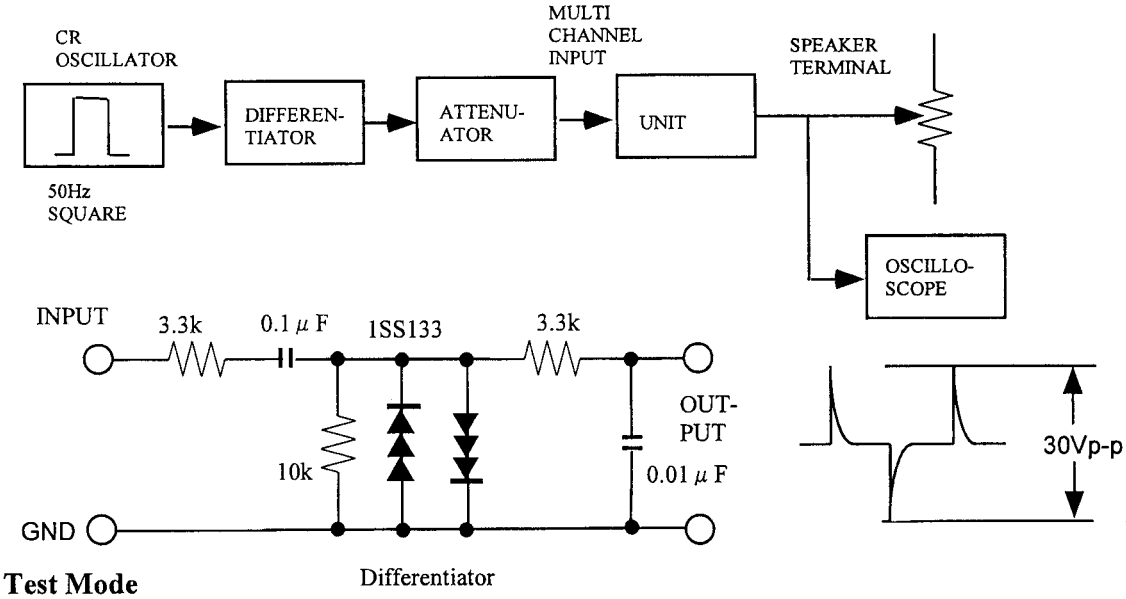


Confirmation of protection circuit

1. Confirmation of operation of speaker relay
Confirm that the speaker relay turns ON approximate. 5 seconds after the power switch is turned ON.
Confirm that the speaker relay turns OFF immediately after the power switch is turned OFF.

2. Confirmation of DC detection circuit
Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.
During "TEST-" on the FL tube is displayed, press DVD button. Next, press CD button.(Refer to Test mode.)
Apply DC 1.5～3V to MULTI CHANNEL INPUT terminals with no load.
Confirm that the speaker relay turns OFF.
Apply DC -1.5～-3V to MULTI CHANNEL INPUT terminals with no load.
Confirm that the speaker relay turns OFF.

3. Confirmation of Current detection circuit
Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.
During "TEST-" on the FL tube is displayed, press DVD button. Next, press CD button.
Connect Differentiator and apply the 50Hz square signal to the terminal of MULTI CHANNEL INPUT.
Adjust the attenuator or Volume so that the output level becomes 30V p-p.
Confirm that the speaker relay turns OFF when a 1.5 ohm load is connected.



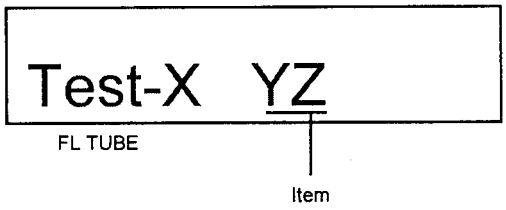
Differentiator

Test Mode

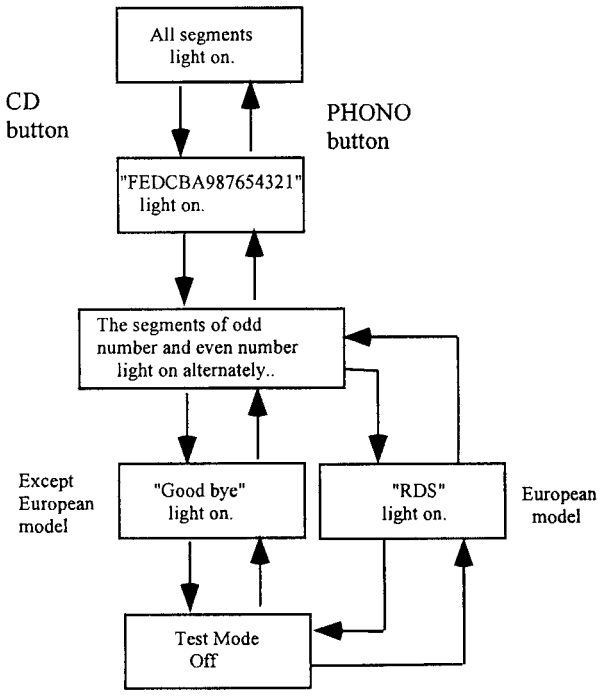
1. Turn POWER button on.
2. Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.
3. During "TEST-" on the FL tube is displayed, press CD, DVD, VIDEO 1, or VIDEO 2 button to set the unit to the test mode shown below.
4. Press CD or PHONO button to select the test item.

Button Operation in the Test Mode

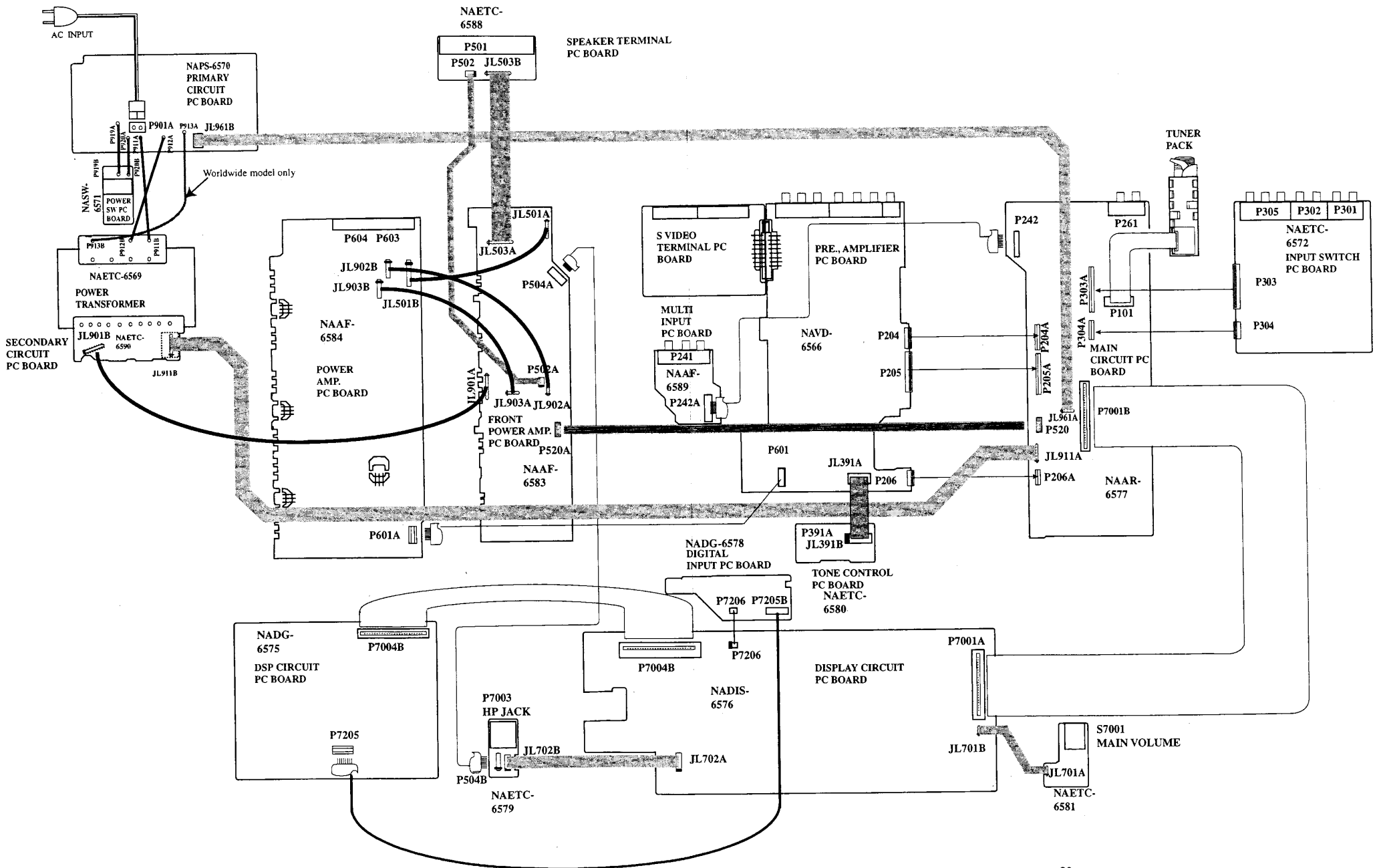
Button Operation	Test Mode
CD	TEST-0
DVD	TEST-1
VIDEO 1	TEST-2
VIDEO 2	TEST-3
CD	UP of item
PHONO	DOWN of item



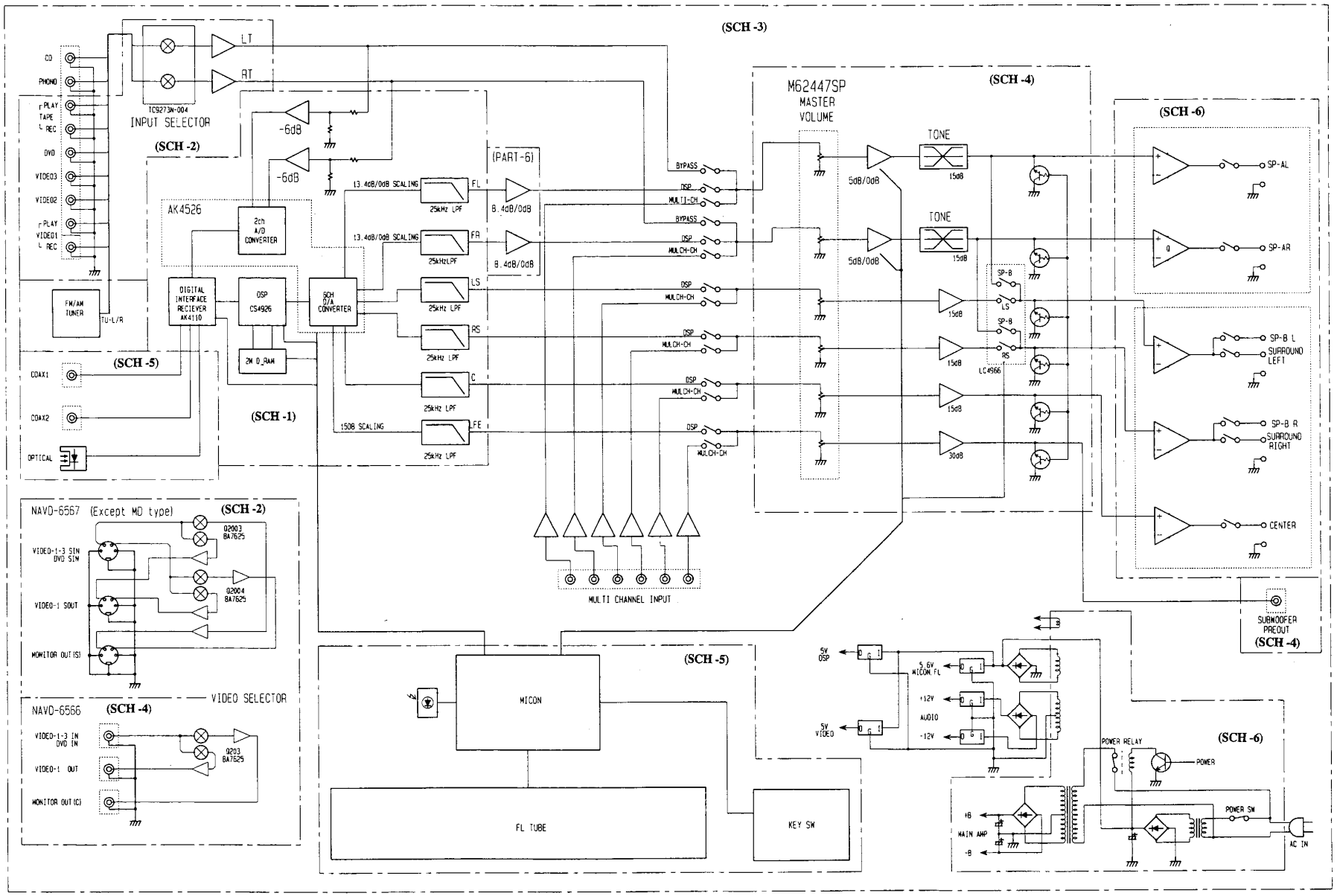
TEST-0

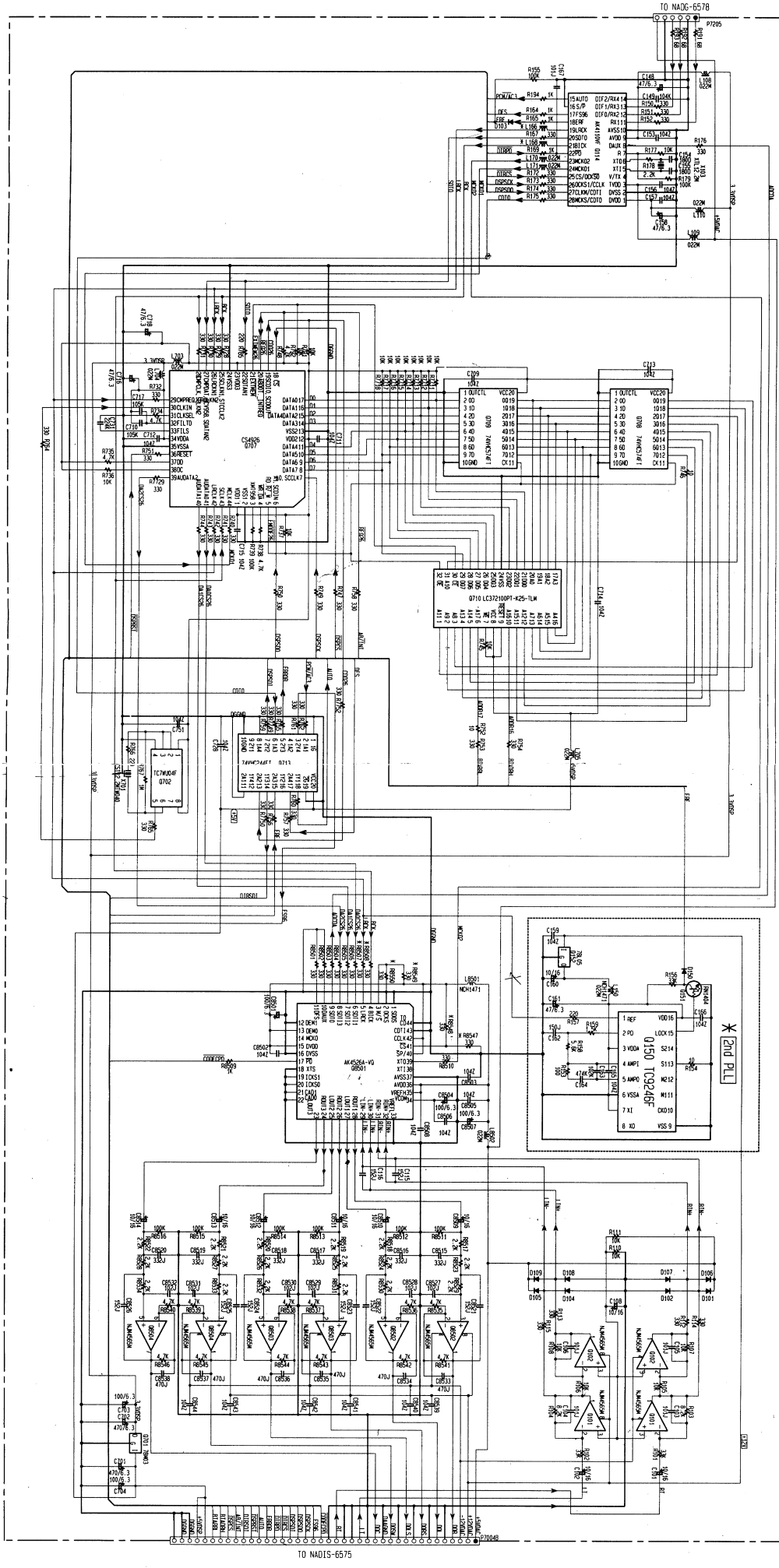


WIRING VIEW


AC INPUT
NAPS-6570
PRIMARY
CIRCUIT
PC BOARD
P901A
P913A
JL961B
P919A
P920A
P911A
P912A
P919B
P920B
P913B
P912B
P911B
NASW-
6571
POWER
SW PC
BOARD
Worldwide model only
NAETC-6569
POWER
TRANSFORMER
JL901B
NAETC-
6590
JL911B
SECONDARY
CIRCUIT
PC BOARD
NAETC-
6588
P501
P502
JL503B
SPEAKER TERMINAL
PC BOARD
P604
P603
JL902B
JL903B
JL501B
NAAF-
6584
POWER
AMP.
PC BOARD
JL501A
JL503A
P504A
P502A
JL903A
JL902A
JL901A
FRONT
POWER AMP.
PC BOARD
P520A
NAAF-
6583
P601A
S VIDEO
TERMINAL PC
BOARD
PRE., AMPLIFIER
PC BOARD
MULTI
INPUT
PC BOARD
P241
NAAF-
6589
P242A
NAVD-
6566
P204
P205
P242
P261
TUNER
PACK
P305
P302
P301
NAETC-
6572
INPUT SWITCH
PC BOARD
P303
P304
P303A
P304A
P101
MAIN
CIRCUIT PC
BOARD
P204A
P205A
JL961A
P520
P7001B
JL911A
P601
JL391A
P206
P206A
NAAR-
6577
P391A
JL391B
TONE CONTROL
PC BOARD
NAETC-
6580
NADG-6578
DIGITAL
INPUT PC BOARD
P7206
P7205B
NADG-
6575
DSP CIRCUIT
PC BOARD
P7004B
P7004B
P7206
P7001A
DISPLAY CIRCUIT
PC BOARD
NADIS-
6576
P7003
HP JACK
P7205
JL702B
JL702A
P504B
NAETC-
6579
JL701B
S7001
MAIN VOLUME
JL701A
NAETC-
6581

BLOCK DIAGRAM



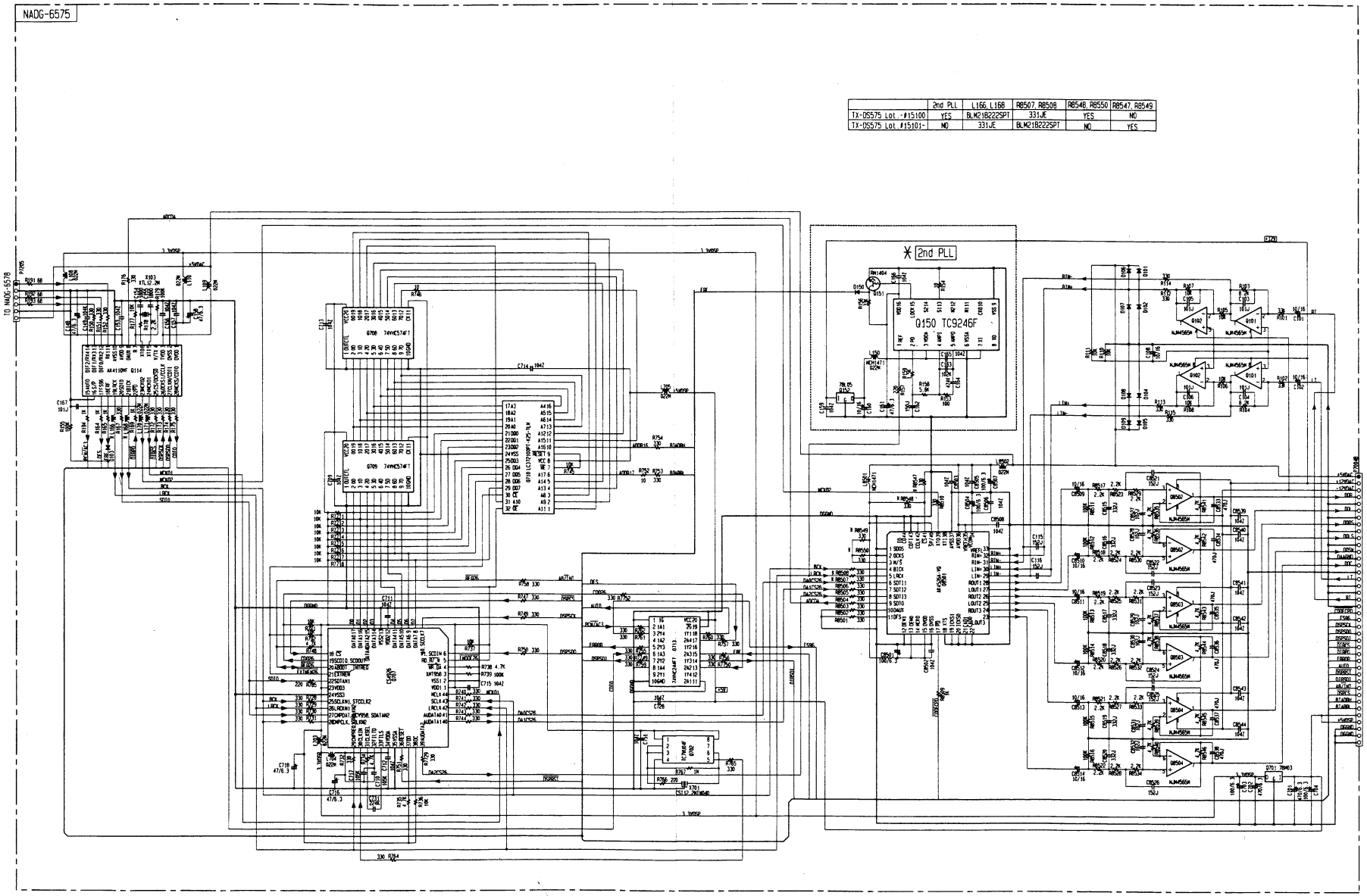

TO NADG-6578
TO NADIS-6575
12nd PLL

SCHEMATIC DIAGRAM 1

DSP

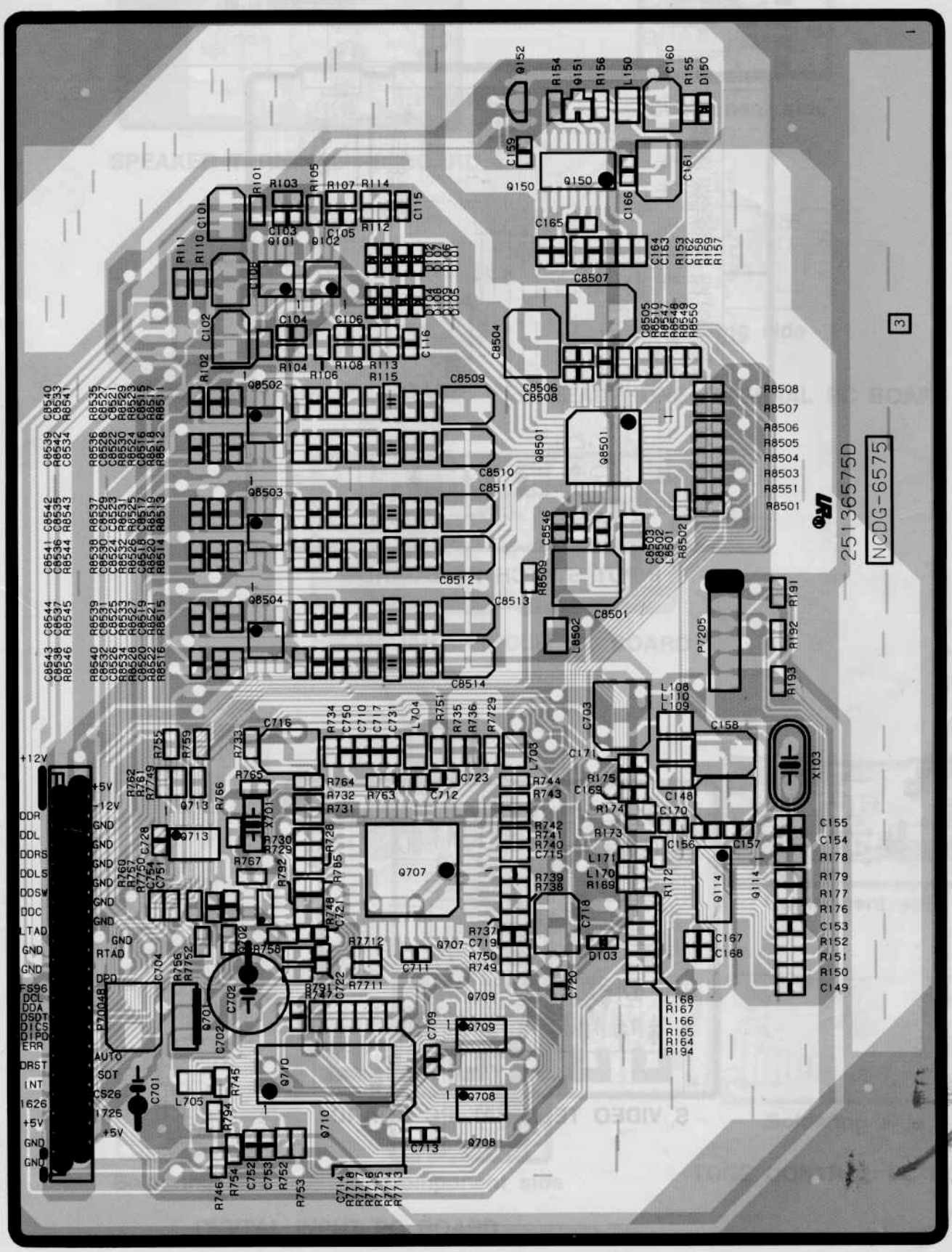
NADG-6575

	2nd PLL	L166, L168	R8507, R8508	R8548, R8550	R8547, R8549
TX-DS575 Lot.-#15100	YES	BLM21B222SPT	33 1/4E	YES	NO
TX-DS575 Lot.#15101-	NO	33 1/4E	BLM21B222SPT	NO	YES



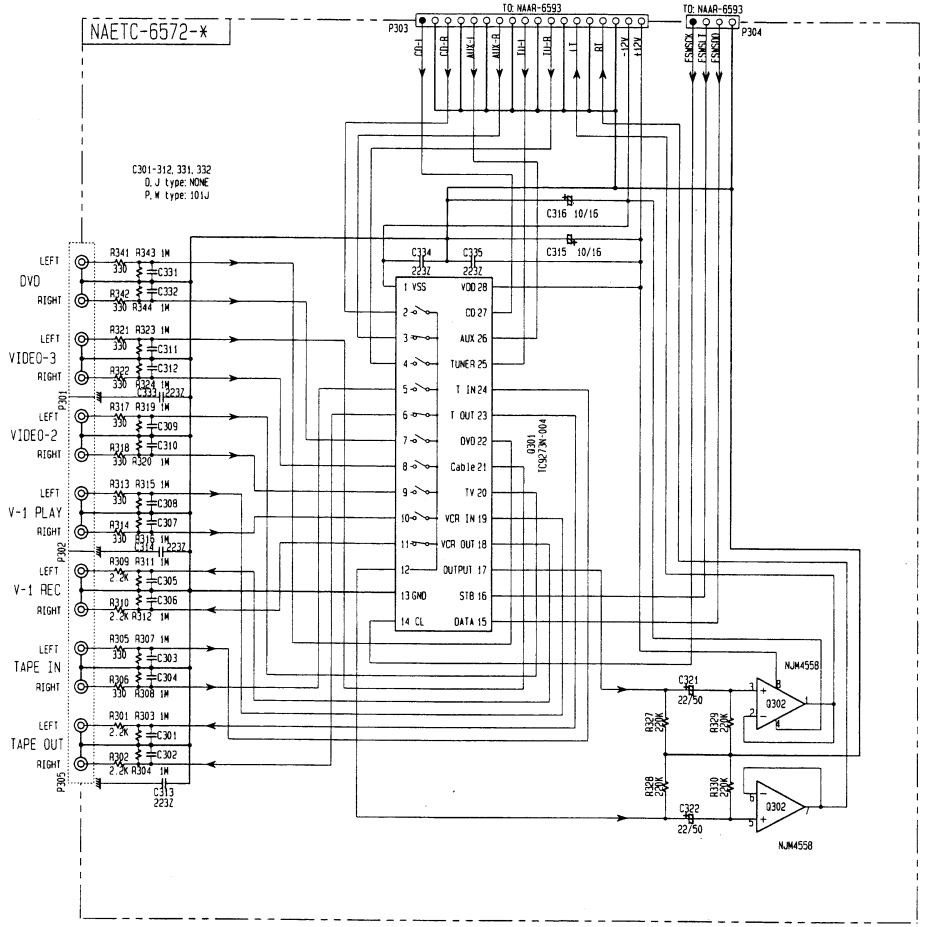
TX-DS575

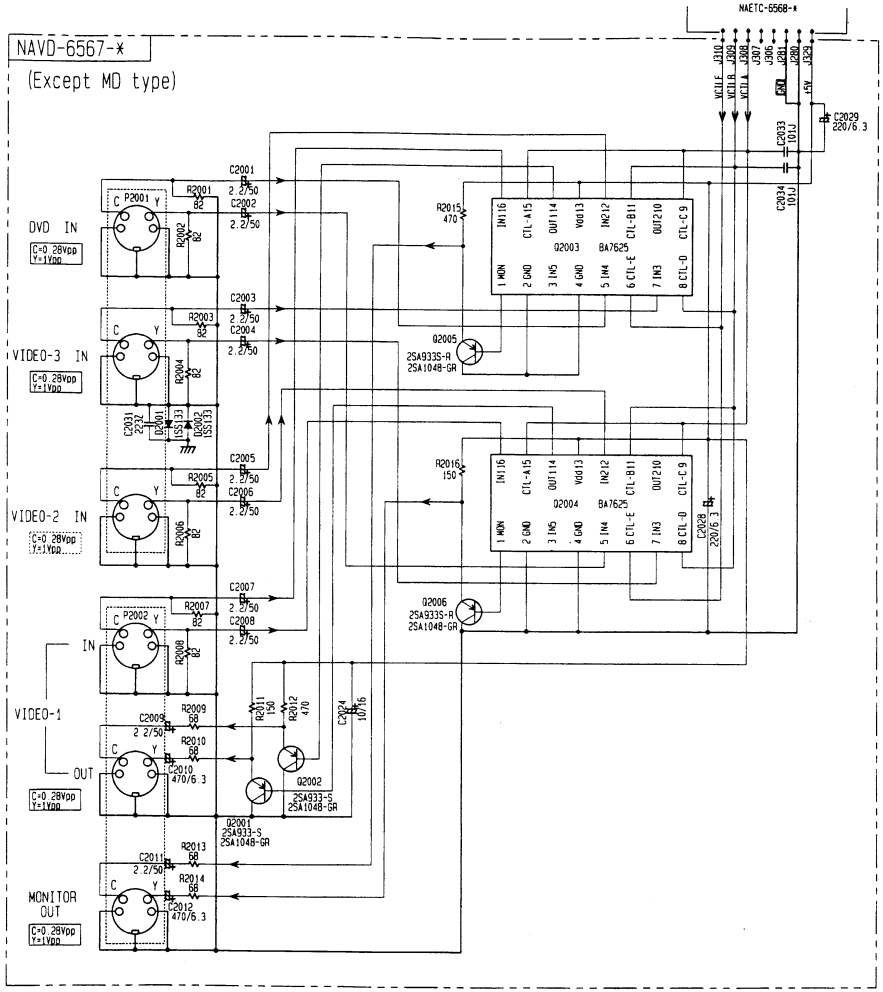
PRINTED CIRCUIT BOARD VIEW



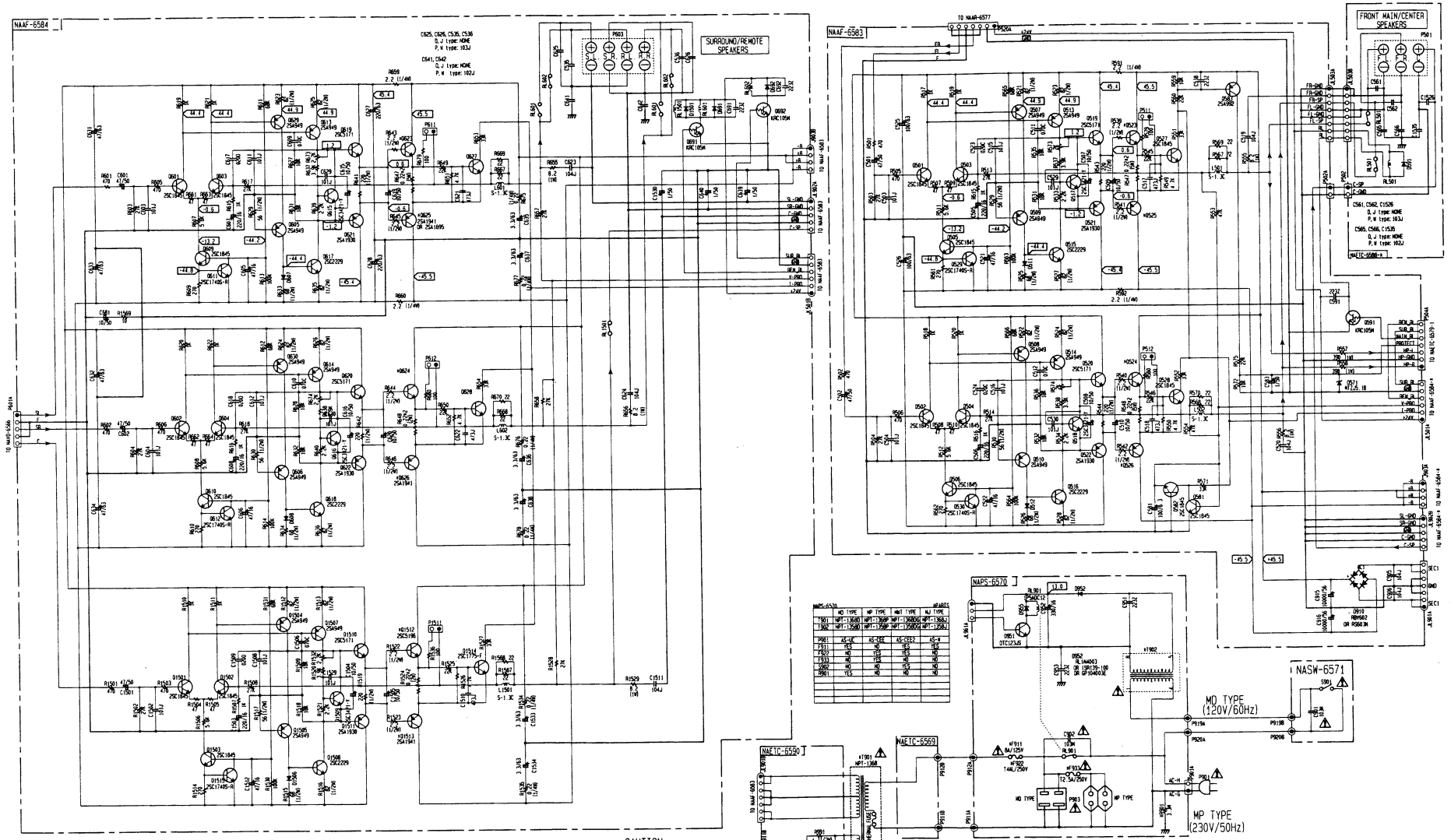
DSP CIRCUIT PC BORAD

SCHEMATIC DIAGRAM 2



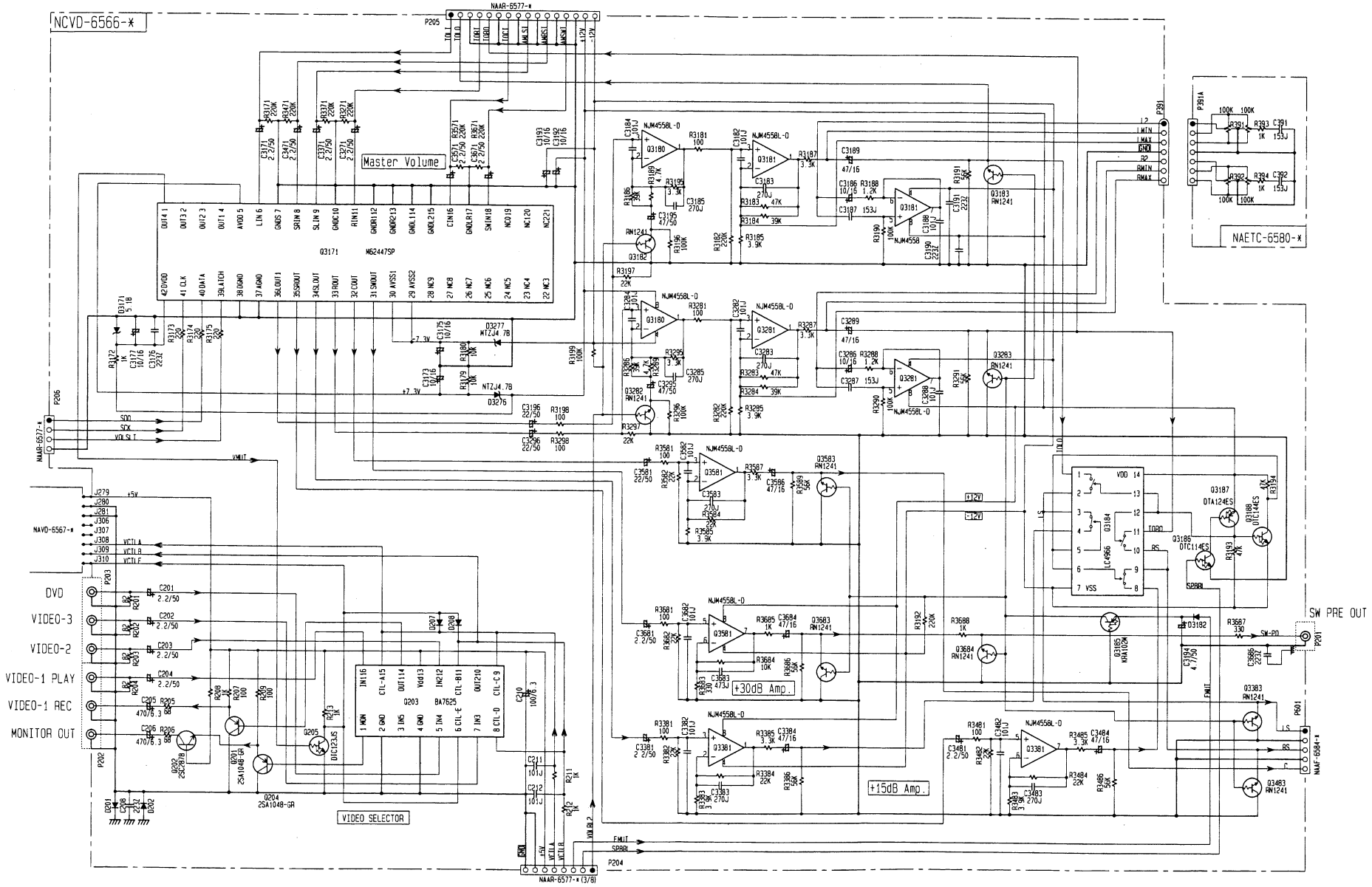


SCHEMATIC DIAGRAM 3

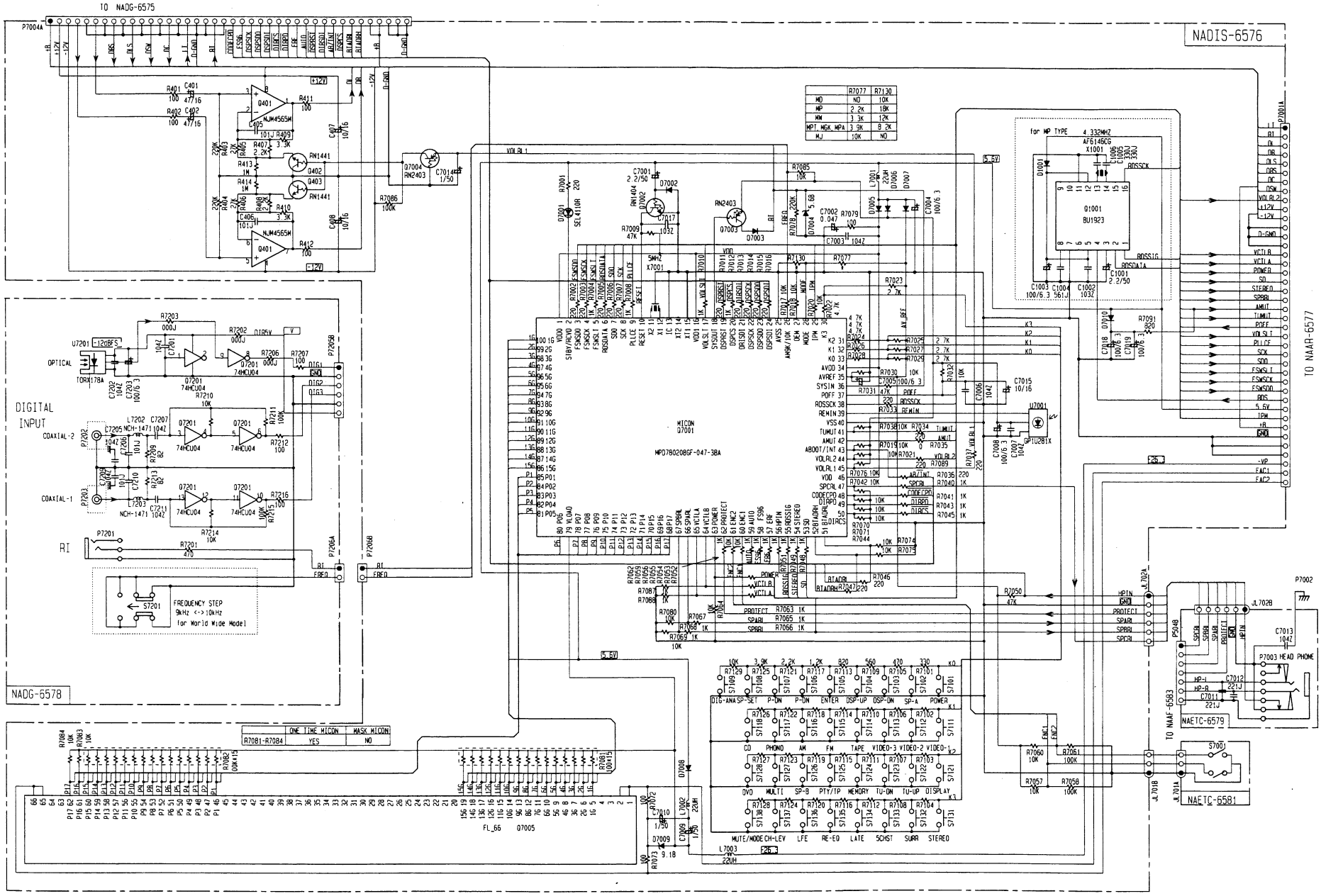

NAAF-6584
NAAF-6583
SURROUND/REMOTE SPEAKERS
FRONT MAIN/CENTER SPEAKERS
NAPS-6570
NASW-6571
NAETC-6590
NAETC-6569
NAETC-6568
MD TYPE (120V/60Hz)
MP TYPE (230V/50Hz)
MW TYPE (220V/50Hz, 120V/60Hz SWITCHABLE)
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.
ATTENTION
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE FUSE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.
CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT. E POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. LE NUMERO EST INDIQUE LA OU LE PRESENT SYMBOL EST APPOSE.

Q523, Q524, Q623, Q624, D1512	2SC5198 or 2SC4468
Q525, Q526, Q625, Q626, D1513	2SA1941 or 2SA1695

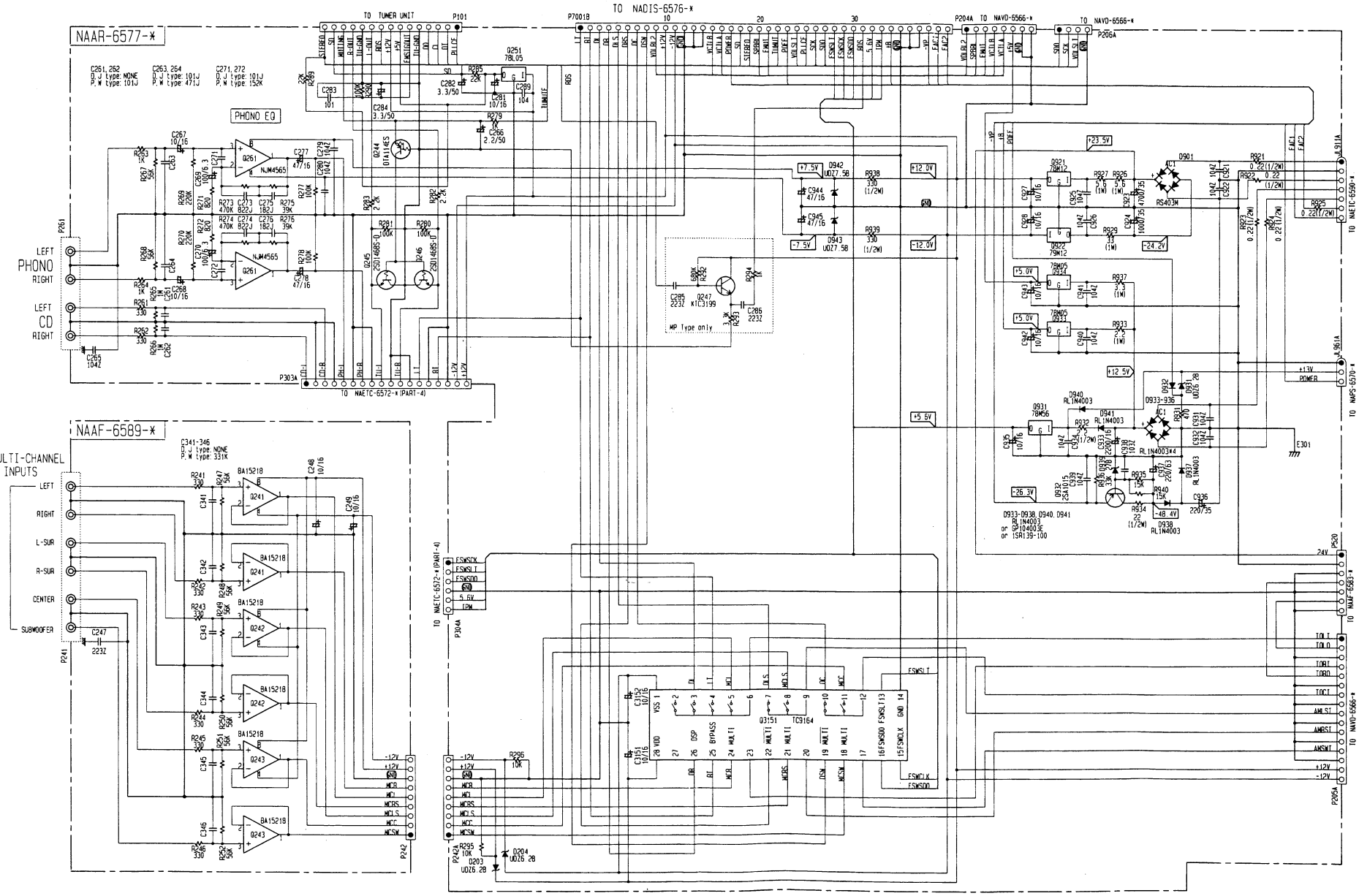
SCHEMATIC DIAGRAM 4



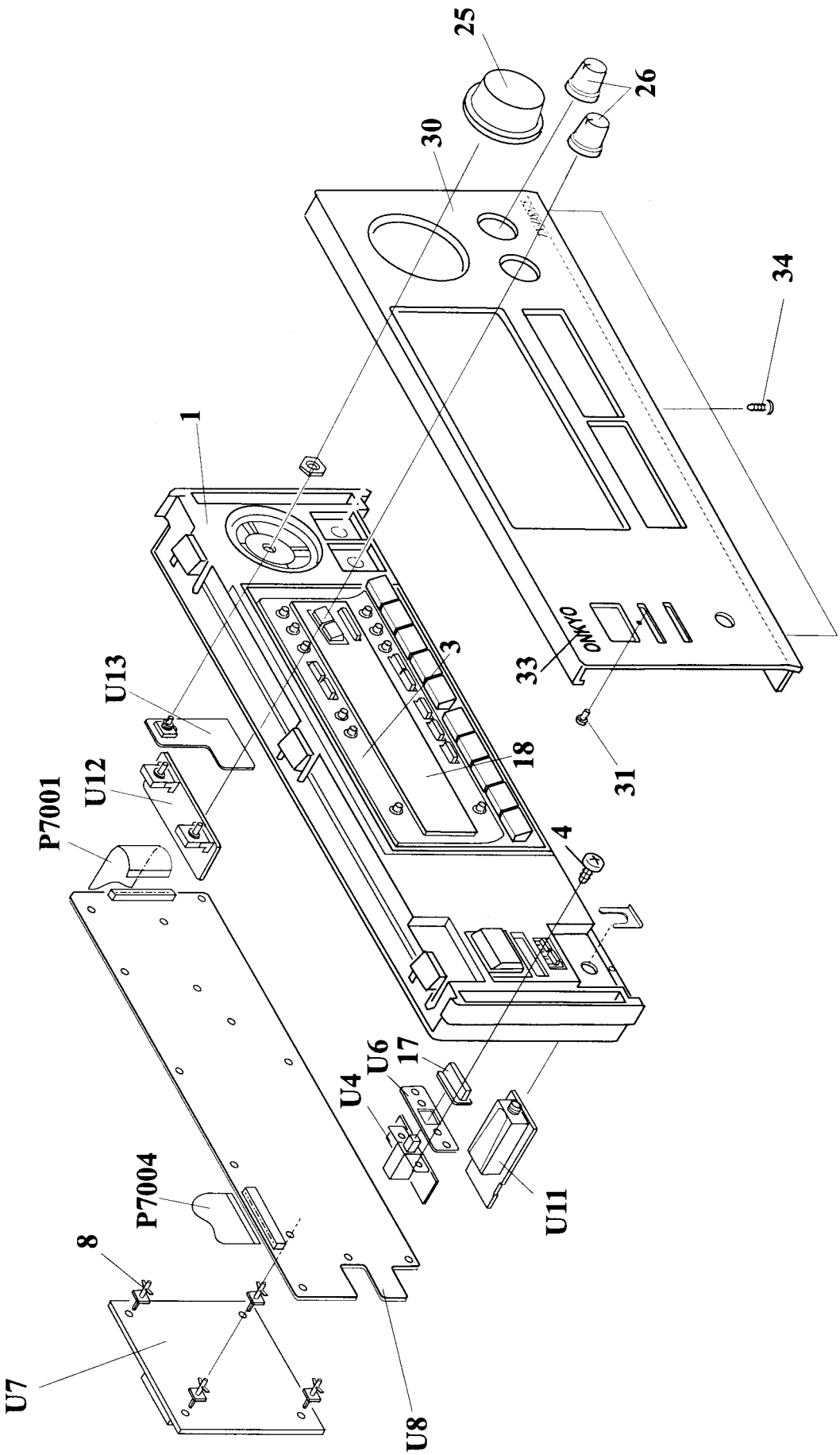
SCHEMATIC DIAGRAM 5

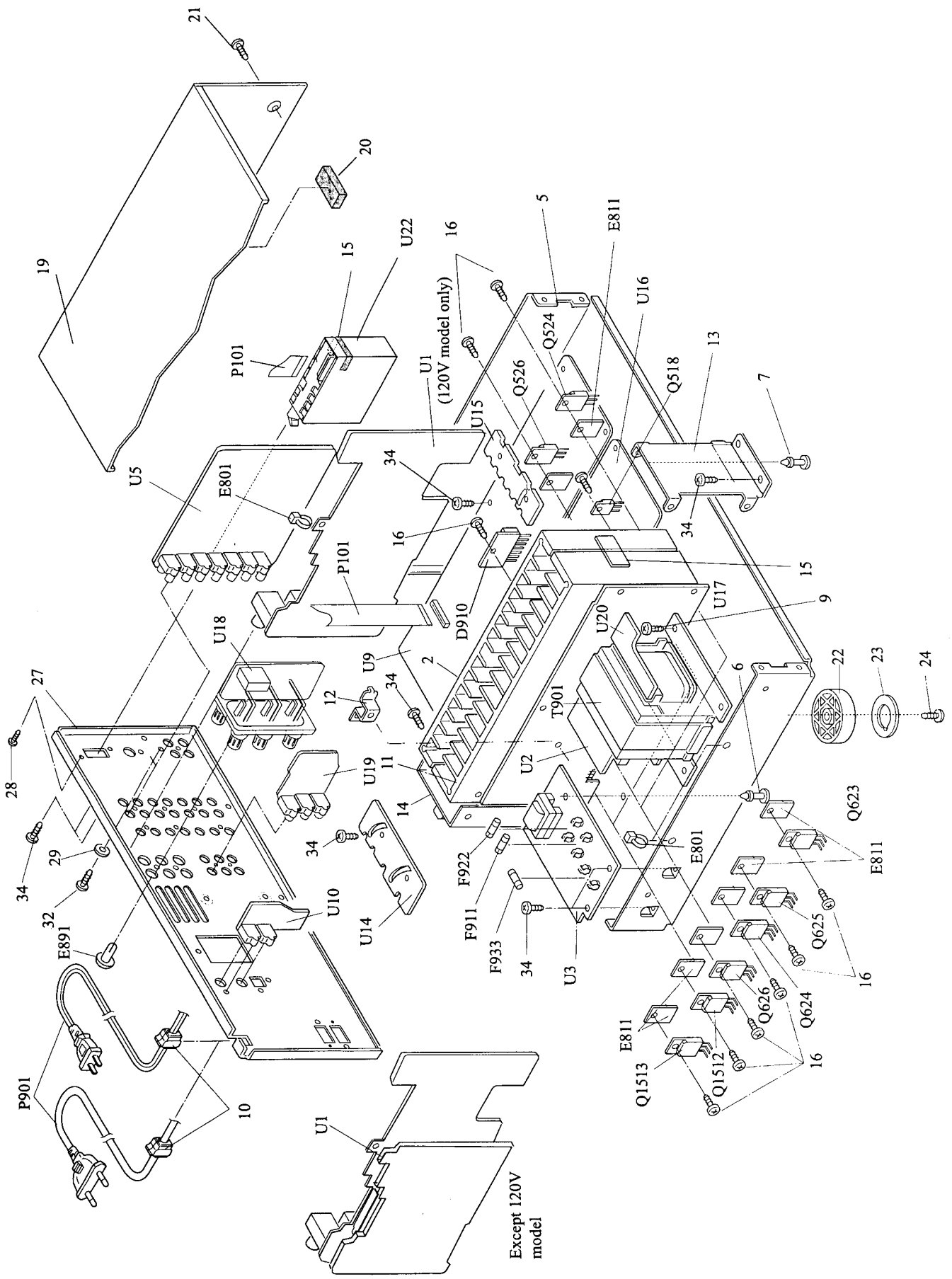


SCHEMATIC DIAGRAM 6



EXPLODED VIEW




21
20
19
15
U22
16
5
E811
U16
P101
U1
(120V model only)
Q524
Q526
U15
Q518
13
7
U5
E801
34
16
P101
D910
U17
15
9
U18
U9
2
U20
12
34
T901
6
22
23
24
27
28
U19
11
U2
14
Q623
E811
34
29
32
E891
U10
U14
F922
F911
F933
34
U3
E801
Q625
16
Q626
Q624
E811
Q1513
Q1512
16
P901
10
U1
Except 120V
model

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
1	27111108	Front bracket <B>
	27111109	Front bracket <S>
	27111110	Front bracket <G>
2	27160439	Heat sink S
3	27215319	Decorative frame <B><D/T/W/A>
	27215320	Decorative frame <S>
	27215321	Decorative frame <G>
	27215322	Decorative frame <B><P>
4	82143010	3P+10FN(BC), Pan head screw
5	27100371A	Chassis
6	27190266	KGLS-12RF,Holder
7	27190428A	KGLS-10RF,Holder
8	27190896	KGLS-10S,Holder
9	830440089	4TTC+8C(BC), Self-tapping screw
10	27300750	⚠ Bushing, cord
11	27160438	Heat sink L
12	27141681	Retainer PWB
13	27141736	Retainer, front
14	27141737	Retainer, rear
15	29110083	Tape
16	801433	3SMS8W.SW+14B(BC),Special screw
17	28325497A	Knob, Power <B>
	28325499A	Knob, Power <G>
	28325547A	Knob, Power <S>
18	28191846	Clear plate <B>
	28191847	Clear plate <G/S>
19	28184752	Top cover <B>
	28184753	Top cover <G>
	28184754	Top cover <S>
20	28141272Y	10x60x20,Cushion
21	838430088	3TTB+8B(BC),Self-tapping screw <B>
	838930088	3TTB+8B(UN),Self-tapping screw <G/S>
22	27175319A	Leg
23	28141332	Cushion
24	831430088	3TTW+8B(BC), Self-tapping screw
25	28325648	Knob, Volume <D>
	28325651	Knob, Volume <B><P/T/W/A>
	28325652	Knob, Volume <S>
	28325653	Knob, Volume <G>
26	28325405	Knob, Tone <B>
	28325407	Knob, Tone <G>
	28325474Y	Knob, Tone <S>

REF. NO.	PART NO.	DESCRIPTION
27	27122569	Rear panel <D>
	27122570A	Rear panel <P>
	27122571A	Rear panel <T>
	27122572A	Rear panel <W>
	27122573A	Rear panel <R>
	27122574A	Rear panel <P>
28	838430068	3TTB+6B(BC),Self-tapping screw
29	87643010	W3*10F(BC),Flat washer
30	27212086	Front panel <B>
	27212088	Front panel <S>
	27212089	Front panel <G>
31	28198778	Facet
32	838930088	3TTB+8B(UN),Self-tapping screw
33	28135244Y	Badge <B>
	28135245	Badge <S/G>
34	838130088	3TTB+8B,Self-tapping screw
D910	22380038 or	RBV602 or
	22380274	RS603M,Diode
E801	260208	Wire tie
E811	223024	AC238,Isolated sheet
E891	880048	P-3055B-8L,Plastic rivet <P/T/A>
P101	2047152012	NCFC7-152012,Flexible flat cable
P7001	2047402512	NCFC7-402512,Flexible flat cable
P7004	2047401512	NCFC7-401512,Flexible flat cable
P7011	27190608-1	Clamp
Q1512	2203063,	* 2SC5198-O,
Q523,Q524	2203062,	* 2SC5198-R,
Q623,Q624	2202523,	* 2SC4468-O,
	2202524 or	* 2SC4468-Y or
	2202526	* 2SC4468-P,Transistor
Q1513	2203053,	* 2SA1941-O,
Q525,Q526	2203052,	* 2SA1941-R,
Q625,Q626	2202513,	* 2SA1695-O,
	2202514 or	* 2SA1695-Y or
	2202516	* 2SA1695-P,Transistor
Q517,Q518	2212654 or	2SC3421-Y or
	2212653	2SC3421-O,Transistor
T901	2301405	⚠ NPT-1368D,Power transformer <D>
	2301406	⚠ NPT-1368P,Power transformer <P/T/A>
	2301407	⚠ NPT-1368DG,Power transformer <W>

Note: <B>: Black model only
<S>: Silver model only
<G>:Golden model only
<D>: 120V model only
<P>: 230V model only
<T>:Asian model only
<W>: Worldwide model only
<A>: Australian model only
<R>: Chinese model only

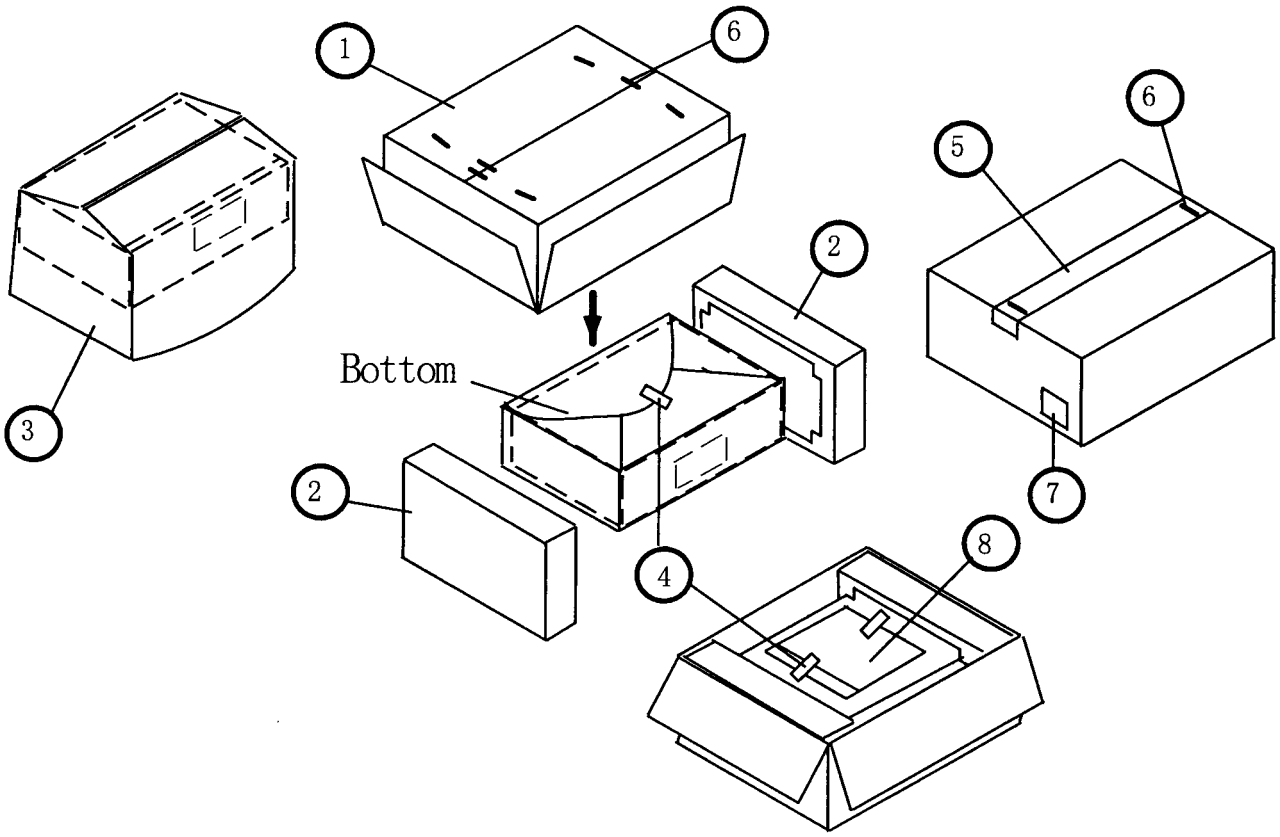
CAUTION: Replacement for transistor of mark * , if necessary must be made from the same beta group (HFE) as the original type.

REF. NO.	PART NO.		DESCRIPTION
F911	252198Y	⚠	8A-UL,Fuse <D/W>
F922	252077 or	⚠	4A-SE-EAK or
	252243	⚠	4A-SE-TL250V,Fuse <P/T/W/A>
F933	252075 or	⚠	2.5A-SE-EAK or
	252241	⚠	2.5A-SE-TL250V,Fuse <P/T>
P901	253279HIT or	⚠	AS-UC-2#18 or
	253280VOL	⚠	AS-UC-2#18,Power supply cord <D>
	253193HIT or	⚠	AS-CEE or
	253195MARY	⚠	AS-CEE,Power supply cord <P/T>
	253233KAW	⚠	AS-CEE-2,Power supply cord <WT>
	253197HIT	⚠	AS-SAA,Power supply cord <A>
	253267KAW,	⚠	AS-CCEE,
	253285HIT or	⚠	AS-CCEE or
	253286VOL	⚠	AS-CCEE,Power supply cord <R>
U1	1A832566-1A		NAVD-6566-1A,Pre., amplifier PC board ass'y <D>
	1A832566-1B		NAVD-6566-1B,Pre., amplifier PC board ass'y <P/T>
	1A832566-1C		NAVD-6566-1C,Pre., amplifier PC board ass'y <W>
	1A832566-1D		NAVD-6566-1D,Pre., amplifier PC board ass'y <A>
U2	1A832569-1A		NAETC-6569-1A,Transformer terminal PC board ass'y <D>
	1A832569-1B		NAETC-6569-1B,Transformer terminal PC board ass'y <P/T>
	1A832569-1C		NAETC-6569-1C,Transformer terminal PC board ass'y <W>
	1A832569-1D		NAETC-6569-1D,Transformer terminal PC board ass'y <A>
U3	1A832570-1A		NAPS-6570-1A,Primary circuit PC board ass'y <D>
	1A832570-1B		NAPS-6570-1B,Primary circuit PC board ass'y <P/T>
	1A832570-1C		NAPS-6570-1C,Primary circuit PC board ass'y <W>
	1A832570-1D		NAPS-6570-1D,Primary circuit PC board ass'y <A>
U4	1A832571-1A		NASW-6571-1A,Power switch PC board ass'y <D>
	1A832571-1B		NASW-6571-1B,Power switch PC board ass'y <P/T>
	1A832571-1C		NASW-6571-1C,Power switch PC board ass'y <W>
	1A832571-1D		NASW-6571-1D,Power switch PC board ass'y <A>
U5	1A832572-1A		NAETC-6572-1A,Input switch PC board ass'y <D>
	1A832572-1B		NAETC-6572-1B,Input switch PC board ass'y <P/T>
	1A832572-1C		NAETC-6572-1C,Input switch PC board ass'y <W>
	1A832572-1D		NAETC-6572-1D,Input switch PC board ass'y <A>
U6	1A832573-1A		NAETC-6573-1A, PC board for holder <D>
	1A832573-1B		NAETC-6573-1B, PC board for holder <P/T>
	1A832573-1C		NAETC-6573-1C, PC board for holder <W>
	1A832573-1D		NAETC-6573-1D, PC board for holder <A>
U7	1A832575-1		NADG-6575-1,DSP circuit PC board ass'y
U8	1A832576-1A		NADIS-6576-1A,Display circuit PC board ass'y <D>
	1A832576-1B		NADIS-6576-1B,Display circuit PC board ass'y <P>
	1A832576-1C		NADIS-6576-1C,Display circuit PC board ass'y <T/A>
	1A832576-1D		NADIS-6576-1D,Display circuit PC board ass'y <W>

REF. NO.	PART NO.	DESCRIPTION
U9	1A832577-1A	NAAR-6577-1A,Main PC board ass'y <D>
	1A832577-1B	NAAR-6577-1B,Main PC board ass'y <P>
	1A832577-1C	NAAR-6577-1C,Main PC board ass'y <T/A>
	1A832577-1D	NAAR-6577-1D,Main PC board ass'y <W>
U10	1A832578-1A	NADG-6578-1A,Digital input PC board ass'y <D>
	1A832578-1B	NADG-6578-1B,Digital input PC board ass'y <P>
	1A832578-1C	NADG-6578-1C,Digital input PC board ass'y <T/A>
	1A832578-1D	NADG-6578-1D,Digital input PC board ass'y <W>
U11	1A832579-1A	NAETC-6579-1A,Headphone terminal PC board ass'y <D>
	1A832579-1B	NAETC-6579-1B,Headphone terminal PC board ass'y <P>
	1A832579-1C	NAETC-6579-1C,Headphone terminal PC board ass'y <T/A>
	1A832579-1D	NAETC-6579-1D,Headphone terminal PC board ass'y <W>
U12	1A832580-1A	NAETC-6580-1A,Tone control PC board ass'y <D>
	1A832580-1B	NAETC-6580-1B,Tone control PC board ass'y <P>
	1A832580-1C	NAETC-6580-1C,Tone control PC board ass'y <T/A>
	1A832580-1D	NAETC-6580-1D,Tone control PC board ass'y <W>
U13	1A832581-1A	NAETC-6581-1A,Volume control PC board ass'y <D>
	1A832581-1B	NAETC-6581-1B,Volume control PC board ass'y <P/T/W/A>
U14	1A832582-1A	NAETC-6582-1A,Holder PC board for wire <D>
	1A832582-1B	NAETC-6582-1B,Holder PC board for wire <P/T/W/A>
U15	1A832574-1A	NAETC-6574-1A,Holder PC board for wire <D>
	1A832574-1B	NAETC-6574-1B,Holder PC board for wire <P/T/W/A>
U16	1A832583-1A	NAAF-6583-1A,Front channel power amplifier PC board ass'y <D>
	1A832583-1B	NAAF-6583-1B,Front channel power amplifier PC board ass'y <P/T/W/A>
U17	1A832584-1A	NAAF-6584-1A,Power amplifier PC board ass'y <D>
	1A832584-1B	NAAF-6584-1B,Power amplifier PC board ass'y <P/T/W/A>
U18	1A832588-1A	NAETC-6588-1A,Speaker terminal PC board ass'y <D>
	1A832588-1B	NAETC-6588-1B,Speaker terminal PC board ass'y <P/T/W/A>
U19	1A832589-1A	NAETC-6589-1A,Multi-channel input terminal PC board ass'y <D>
	1A832589-1B	NAETC-6589-1B,Multi-channel input terminal PC board ass'y <P/T/W/A>
U20	1A832590-1A	NAETC-6590-1A,Secondary circuit PC board ass'y <D>
	1A832590-1B	NAETC-6590-1B,Secondary circuit PC board ass'y <P/T/W/A>
U22	240134	TFCE1U114A,Tuner unit <D>
	240135	TFCE1E512A,Tuner unit <P/T/W/A>

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PACKING VIEW



REF. NO.	PART NO.	DESCRIPTION
1	29053413	Carton box <D>
	29053414	Carton box <P>
	29053415	Carton box <T/W/A>
	29053417	Carton box <S>
	29053416	Carton box <G>
2	29091844	Pad
3	29100034-1A	850*650, Polybag
4	261504	Paper tape
5	29110071 or	PP tape
	29110098	PP tape
6	282301	Staple
7	29362439	Label UPC <D>
	29362441	Label EAN <P/T/W/A>
	29362442	Label EAN <S>
	29362443	Label EAN <G>
8	232140	NMA-3057,AM loop antenna
	24140391A	RC-391M,Remote controller
	25055018	CV-K-1,Conversion plug <WT>
	25065462	YAE21-0237,Antenna adapter <T/W/A>
	29095866	Sheet <D>
	29100097-1A	350*250,Polybag
	292115	FM antenna <P/T/W/A>
	292142	FM antenna <D>
	29342699A	Instruction manual E—
	29342700	Instruction manual U3 GDSW <P>
	29342701	Instruction manual U3 FSI <P>
	29342702	Instruction manual T <T/W>—
	29342709	Instruction sheet <D>
	29342760	Instruction sheet, S video <P/T/W/A>
	29361786	Label <T/WT>
	29365083	Warranty card <D>
	3010054	UM-3, Battery